

CHAPTER 2

UH-1N CREW CHIEF/AERIAL OBSERVER

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CHAPTER 2

UH-1N CREW CHIEF/AERIAL OBSERVER

200. MARINE LIGHT ATTACK SQUADRON UH-1N UNIT TEMPLATE, MISSION STATEMENT, CORE COMPETENCY SKILLS

NOTE

The capabilities defined and described in the core capability and unit template sections are provided to ensure each like squadron maintains a common base of training and depth of capabilities. When resources permit, and when in the judgment of the commander additional training would significantly increase the unit's warfighting capability, training to a level above these base capabilities is permitted. It is incumbent upon and expected of the commander to balance any increase in the depth of core capabilities against the long term health and readiness of the unit while staying within resource constraints.

1. HMLA Mission. Provide offensive air support, utility support, armed escort and airborne supporting arms coordination during expeditionary, joint, or combined operations.

2. Mission Essential Task List (METL)

a. Provide airborne command, control and coordination for assault support operations.

b. Provide control, coordination, target acquisition and terminal guidance for supporting arms.

c. Conduct assault support transport of combat troops, supplies and equipment.

d. Conduct armed and visual reconnaissance.

e. Provide armed escort.

f. Provide an airborne command and control platform for command elements.

g. Conduct assault support for evacuation operations and maritime special operations.

h. Provide fire support and security for forward and rear area forces.

i. Conduct Tactical Recovery of Aircraft and Personnel (TRAP) operations.

j. Augment local Search and Rescue (SAR) assets, and provide support for casualty evacuation operations.

k. Maintain the capability to operate from amphibious shipping, other floating bases, and Forward Operating Bases (FOBs).

l. Maintain the capability to operate at night, in adverse weather, and under instrument flight conditions at extended ranges.

m. Maintain self-defense capability from ground-to-air and air-to-air threats.

n. Perform organizational maintenance on assigned aircraft in all environmental conditions.

3. Table Of Organization

UH-1 & AH-1

Full Squadron = 27 Aircraft: 18 AH-1W, 9 UH-1N.

T/O = 72 Officers: 44 AH-1W, 23 UH-1N, 4 Maintenance Officers, 1 Flight Surgeon, 4 Corpsmen, 19 Crew Chiefs, 17 Aerial Gunners/Observers and 4 Functional Check Aircrew for a total of 399 Marine and Navy Enlisted.

Detachment = 6 AH-1W & 3 UH-1N: T/O = 21 Officers, 95 Enlisted.

Mother Squadron = Full Squadron Minus One Detachment.

4. Squadron Core Capability

a. A core capable squadron is able to sustain the following minimum performance on a daily basis during sustained contingency/combat operations, assuming at least 90% PAA, 90% in reporting status and 90% T/O on hand in all MOSs. If <90%, core capability will be degraded by a like percentage. The extent to which a Core Capable squadron is able to surge beyond its core capability is situational dependent.

b. A core capable squadron is able to sortie one, four plane division of which one section is HLL mission capable and one section is LLL. Perform the above from a main base, appropriate sized expeditionary base, and/or from amphibious platforms. All of the above sorties are able to be flown in any mix of sections necessary while performing small team insert/extract, command and control, FAC(A), and armed tactics.

c. A core capable detachment is able to conduct small team insert/extract, command and control, FAC(A), and armed tactics. Sortie one mission capable aircraft in LLL conditions twice during a 24-hour period. Perform the above from a main base, appropriate sized expeditionary base, and/or from amphibious platforms.

5. Qualifications And Designations

a. Qualification. A qualification is a status assigned to personnel based on demonstration of proficiency in a specific skill. Specific criteria to achieve qualifications shall be delineated in individual T&R chapters. Upon successful completion of qualification criteria, commanding officers may issue an appropriate qualification letter for inclusion in the NATOPS jacket and APR with an entry placed in the Qualification/Achievement page of the flight logbook. Aircrew do not lose a qualification as a function of refly factor for individual events. Loss of proficiency (delinquent refly factor) for all associated qualification core skill events constitutes loss of that qualification. Re-qualification requires demonstration of proficiency.

b. Designation. A designation is a status assigned to an individual based on leadership ability. A designation is a command specific, one-time occurrence and remains in effect until removed for cause. Specific designation requirements shall be delineated in individual T&R chapters. Commanders shall issue a designation letter to the individual upon the

occasion of original designation, with appropriate copies for inclusion in the NATOPS jacket and APR/MPR.

c. Qualifications and Designations Matrix. These tables serve to delineate the events required for initial and re-qualification of all qualifications and designations. All phase lectures, briefs, squadron training and prerequisites must be complete prior to completing final events. Qualification and designation letters signed by the commanding officer should be placed in NATOPS and APR jackets. Loss of proficiency for all associated core skill events (200-300 level) causes the associated qualification to be lost. Regaining the qualification requires a demonstration of proficiency through the "R" coded syllabus. The commanding officer may tailor a syllabus based on the experience of the individual pilot.

<u>Qualification</u>	<u>Initial Event Qualification Requirements.</u> All qualifications require a letter signed by the commanding officer to be placed in the NATOPS and APR. <u>Re-qualification.</u> A CCUI/AOUI shall fly all associated qualification "R" coded events. Modification to this standard is at the discretion of the commanding officer.
NATOPS (RQD-601)	IAW OPNAV 3710.7 and an annual qualification letter signed by the CO.
TERF/CAL (QUAL-610)	210, 211, 220, 221, 223
NSQ HLL (QUAL-611)	215, 243 or 244 or 245, 261
NSQ LLL (QUAL-612)	310, 311, 312,
CQ (QUAL-615)	201, 330
NVDCQ (QUAL-616)	202, 331
NIGHT CQ (QUAL-617)	450
RWDACM (QUAL-618)	411, 412
DACM (QUAL-619)	414, 415, 416
SWD GAU-16 (QUAL-620)	240, 243, 261, 315, and NSQ LLL
SWD GAU-17 (QUAL-621)	241, 244, 261, 316, and NSQ LLL
SWD M240 (QUAL-622)	242, 245, 261, 317, and NSQ LLL

<u>Designation</u>	Designation Requirements. All designations require a letter signed by the commanding officer to be placed in the CCUI/AOUI's NATOPS jacket and APR.
CC/AO	CCX-181
CCI (IDSG 680)	500, 504. Must be a TERFI, SWDI, and NSQ LLL.
TERFI (IDSG 681)	IAW MAWTS-1 Course Catalog.
SWDI GAU-16 (IDSG 682)	
SWDI GAU-17 (IDSG 683)	
SWDI M240 (IDSG 684)	
DACMI (IDSG 688)	
NSFI (IDSG 694)	
NSSI (IDSG 695)	
NSI (IDSG 696)	
WTI (IDSG 699)	

d. Basic Aircrew Qualifications. In order to be considered core competent, a squadron must possess the following numbers of aircrew who are at least 75% complete in the core skill and proficient in the core skills listed below (through Combat Qualification phase). Proficiency is defined in paragraph (i) below. (Note: If a squadron is < T/O, required numbers are reduced by a like %)

UH-1N CORE SKILL	SQDN TOTAL 17 C/C & 17 A/O
TERF	5/5
CAL	5/5
SWD	5/5
DLQ	5/5
ANSQ	3/3
TAC	3/3
RW DACM	2/2

e. 200 And 300-Level Sorties Quick Reference. To be considered proficient in a core skill, an aircrew must complete at least 75% of the 200-300 level sorties for that core skill and maintain proficiency in at least the number of respective core skill sorties listed in paragraph (f) below.

UH-1	TERF	CAL	SWD	ANSQ	CQ	TAC	TOTAL
Initial	2	3	6	3	4	3	21
Refresher	1	2	3	1	4	2	13
T&R Codes	210 211	220 221 223	240 241 242 243 244 245	311 312 313	201 202 330 331	261 320 321	

f. Sorties Required To Maintain Core Skill Proficiency. After achieving core skill competency, a CC/AO is required to complete the following events (or sorties that chain these events) in each skill area annually to maintain core skill proficiency based on the refly interval. Per the T&R Manual, Administrative, chaining does not update delinquent events; completing Refresher events do not update incomplete events.

UH-1	TERF	CAL	SWD	ANSQ	CQ	TAC
Sorties	1	2	3	1	1	2
T&R Codes	211	223	240 241 242	313	331	261 321

g. Flight Leader/Instructor Designations. To be considered core competent, a squadron must possess the following numbers of aircrew in the listed flight leadership/instructor categories. (Note: If the squadron is < T/O, required numbers are reduced by a like %)

DESIGNATION	SQDN TOTAL
	19 C/C 17(A/O)
TERFI	3
NSI	2
DACMI	2
WTCCI	2
C/C SWDI	3

h. Currency. A control measure used to provide an additional margin of safety based on exposure frequency to a particular skill. It is a measure of time since the last event demanding that specific skill. Loss of currency does not affect a loss of CRP. For example, currency determines minimum altitudes in rules of conduct based upon the most recent low altitude fly date. Specific currency requirements for individual type mission profiles can be found in chapter 5 of the T&R Manual, Administrative.

i. Proficiency. A measure of achievement of a specific skill. Units shall emphasize proficiency training in core competencies. Refly factors establish the maximum time between demonstration of those particular skills.

CRP is a measurement of "demonstrated proficiency." If an aircrew member exceeds the refly factor for a particular event, the individual loses CRP for that particular event. To regain proficiency, an individual shall complete the delinquent events with a proficient crewman/flight lead. If an entire unit loses proficiency, unit instructors shall regain proficiency by completing an event with an instructor from a like unit. If this is not feasible, the instructor shall regain proficiency by completing the event with another instructor. If a unit has only one instructor and cannot complete the event with an instructor from another unit, he shall regain proficiency with another aircraft commander or as designated by his commanding officer.

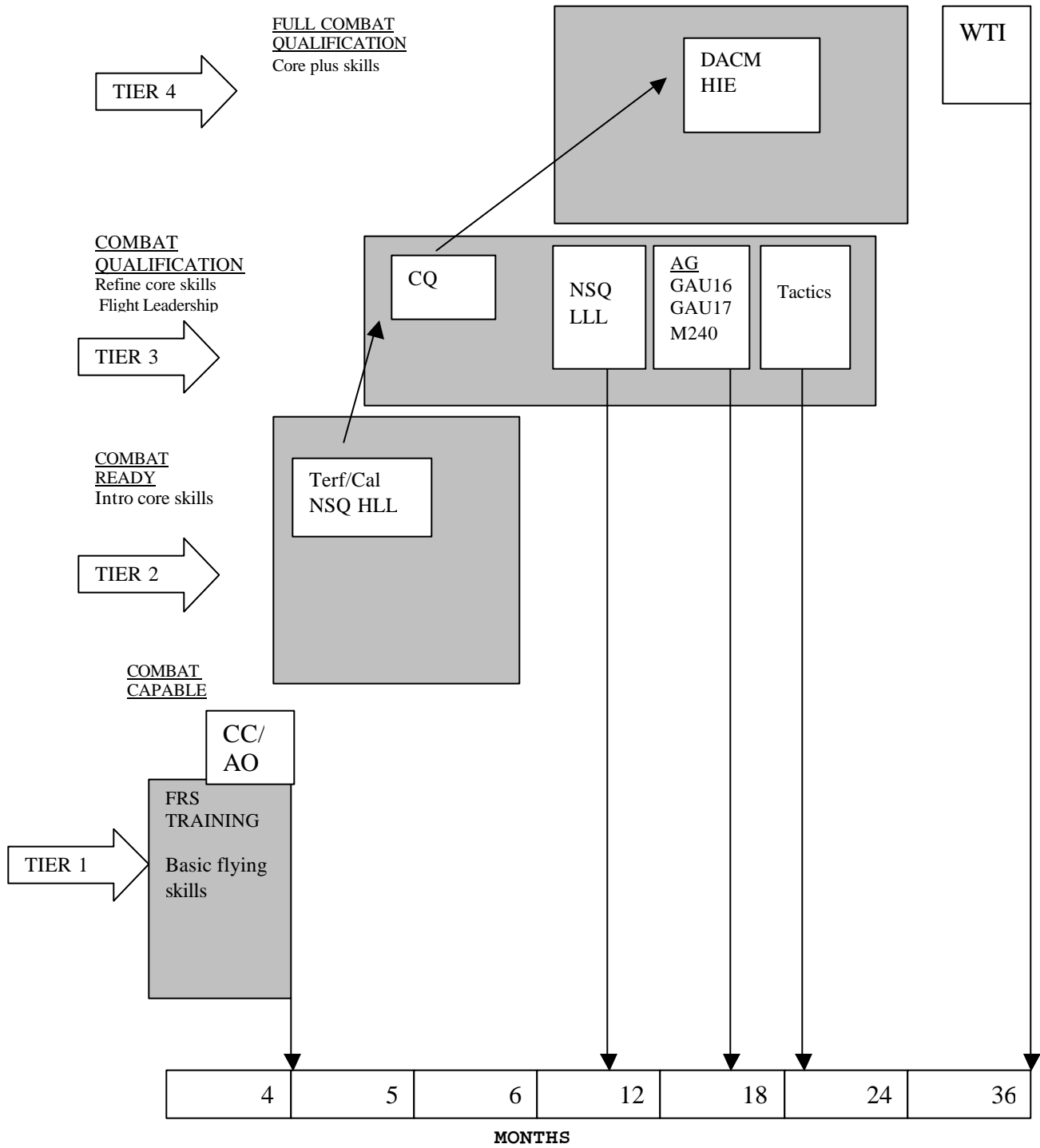


Figure 2-1.--Notional Training Progression Model.

201. PROGRAMS OF INSTRUCTION (POI) FOR BASIC AND TRANSITION CREW CHIEF

<u>WEEKS</u>	<u>COURSE/PHASE</u>	<u>ACTIVITY</u>
1-2	UH-1N Familiarization	Training Squadron
3-8	Ground School	Training Squadron
9-19	Combat Capable Phase	Training Squadron
20-24	Combat Ready Phase	Tactical Squadron
25-28	Combat Qualification Phase	Tactical Squadron
29-32	Full Combat Qualification Phase	Tactical Squadron

202. POI FOR CONVERSION CREW CHIEF

<u>WEEKS</u>	<u>COURSE/PHASE</u>	<u>ACTIVITY</u>
1-5	UH-1N Familiarization	Training Squadron
6-10	Ground School	Training Squadron
11-20	Combat Capable Phase	Training Squadron
21-23	Combat Ready Phase	Tactical Squadron
24-26	Combat Qualification Phase	Tactical Squadron
27-34	Full Combat Qualification Phase	Tactical Squadron

203. POI FOR REFRESHER CREW CHIEF

<u>WEEKS</u>	<u>COURSE/PHASE</u>	<u>ACTIVITY</u>
1-4	UH-1N Familiarization	Tactical Squadron
5	Ground School	Tactical Squadron
6-11	Combat Capable Phase	Tactical Squadron
12-13	Combat Ready Phase	Tactical Squadron
14-15	Combat Qualification Phase	Tactical Squadron
16-18	Full Combat Qualification Phase	Tactical Squadron

204. POI FOR BASIC, TRANSITION, CONVERSION AND REFRESHER AERIAL OBSERVER

<u>WEEKS</u>	<u>COURSE/PHASE</u>	<u>ACTIVITY</u>
1-2	Ground School	Tactical Squadron
3-15	Flight Training	Tactical Squadron

210. GROUND/ACADEMIC TRAINING COURSES OF INSTRUCTION

<u>COURSE</u>	<u>ACTIVITY</u>
UH-1N Familiarization	Fleet Replacement Squadron
SERE School	NAS Brunswick, ME
Appropriate Aerial Gunnery School	Squadron
Aviation Physiology/	
Aviation Water Survival	See OPNAVINST 3710.7_

211. SQUADRON LEVEL TRAINING

Publications and Related Directives
 Communications Procedures
 Maintenance Procedures
 Safety
 Weapons Training
 MAWTS-1 Academic Support Package
 Map Interpretation
 Night Vision Device Operation
 Search and Rescue
 Helicopter Loading
 Fueling and Servicing
 Equipment Stowing

Helicopter Inspection
 Preservation and Cleaning of Helicopter and Corrosion Control
 Aircraft Recognition
 Troubleshooting (Ground/Inflight)

220. FLIGHT TRAINING FOR BASIC/TRANSITION CREW CHIEF

1. Combat Capable Phase

STAGE	NO. EVENTS ACFT/SIM	NO. HOURS ACFT/SIM	CRP ACFT/SIM
Familiarization	4/0	6.0/0.0	13.0/0.0
Formation	2/0	3.0/0.0	7.0/0.0
Terrain Flight	2/0	3.0/0.0	7.0/0.0
Navigation	2/0	3.0/0.0	7.0/0.0
Aerial Gunnery	1/1	1.5/1.0	4.0/2.0
Confined Area Landings	3/0	4.5/0.0	10.0/0.0
External Weight	1/0	1.5/0.0	3.0/0.0
Combat Capable Evaluation	1/0	1.5/0.0	7.0/0.0
TOTAL FOR PHASE	16/1	24.0/1.0	58.0/2.0
COMBINED TOTALS	17	25.0	60.0
ACCUMULATION FOR BASIC/TRANSITION POI	17	25.0	60.0

2. Combat Ready Phase

STAGE	NO. EVENTS ACFT/SIM	NO. HOURS ACFT/SIM	CRP ACFT/SIM
Field Carrier Landing Practice	2/0	2.0/0.0	1.5/0.0
Terrain Flight/Navigation	2/0	3.0/0.0	1.5/0.0
Confined Area Landings	3/0	4.5/0.0	2.5/0.0
Aerial Gunnery	6/0	9.0/0.0	6.0/0.0
Escort	1/0	1.5/0.0	1.0/0.0
Night Systems	1/0	1.5/0.0	1.0/0.0
Tactics	1/0	1.5/0.0	1.5/0.0
TOTAL FOR PHASE	16/0	23.0/0.0	15.0/0.0
COMBINED TOTALS	16	23.0	15.0
ACCUMULATION FOR BASIC/TRANSITION POI	33	48.0	75.0

3. Combat Qualification Phase

STAGE	NO. EVENTS ACFT/SIM	NO. HOURS ACFT/SIM	CRP ACFT/SIM
Night Systems Qualification	3/0	4.5/0.0	6.0/0.0
Aerial gunnery	3/0	4.5/0.0	6.0/0.0
Escort	1/0	1.5/0.0	1.5/0.0
Tactics	2/0	4.0/0.0	4.0/0.0
Carrier Qualification	2/0	2.0/0.0	2.5/0.0
TOTAL FOR PHASE	11/0	16.5/0.0	20.0/0.0
COMBINED TOTALS	11	16.5	20.0
ACCUMULATION FOR BASIC/TRANSITION POI	44	64.5	95.0

4. Full Combat Qualification Phase

<u>STAGE</u>	NO. EVENTS	NO. HOURS	CRP
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Helicopter Insertion/Extraction (HIE)	7/0	7.0/0.0	1.4/0.0
Air-to-Air Gunnery	1/0	1.5/0.0	0.2/0.0
Nuclear, Biological, & Chemical	1/0	1.0/0.0	0.2/0.0
Carrier Qualification	1/0	1.0/0.0	0.2/0.0
Defensive Air Combat Maneuvers	6/0	6.5/0.0	3.0/0.0
TOTAL FOR PHASE	16/0	17.0/0.0	5.0/0.0
COMBINED TOTALS	16	17.0	5.0
TOTAL FOR BASIC/TRANSITION POI	60	71.5	100.0

221. FLIGHT TRAINING FOR BASIC/TRANSITION AERIAL OBSERVER1. Combat Capable Phase

<u>STAGE</u>	NO. EVENTS	NO. HOURS	CRP
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Familiarization	2/0	3.0/0.0	4.0/0.0
Formation	2/0	3.0/0.0	10.0/0.0
Terrain Flight	2/0	3.0/0.0	10.0/0.0
Navigation	1/0	1.5/0.0	5.0/0.0
Aerial Gunnery	1/1	1.5/1.0	5.0/1.0
Confined Area Landings	2/0	3.0/0.0	10.0/0.0
Combat Capable Evaluation	1/0	1.5/0.0	15.0/0.0
TOTAL FOR PHASE	11/1	16.5/1.0	59.0/1.0
COMBINED TOTALS	12	17.5	60.0
ACCUMULATION FOR BASIC/TRANSITION POI	12	17.5	60.0

2. Combat Ready Phase

<u>STAGE</u>	NO. EVENTS	NO. HOURS	CRP
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Field Carrier Landing Practice	2/0	2.0/0.0	2.0/0.0
Terrain Flight/Navigation	2/0	3.0/0.0	2.5/0.0
Confined Area Landings	2/0	3.0/0.0	3.0/0.0
Aerial Gunnery	6/0	9.0/0.0	4.5/0.0
Night Systems	1/0	1.5/0.0	1.0/0.0
Tactics	1/0	1.5/0.0	1.0/0.0
TOTAL FOR PHASE	14/0	20.0/0.0	15.0/0.0
COMBINED TOTALS	14	20.0	15.0
ACCUMULATION FOR BASIC/TRANSITION POI	26	37.5	75.0

3. Combat Qualification Phase

<u>STAGE</u>	NO. EVENTS	NO. HOURS	CRP
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Advanced Night Systems Qualification	3/0	4.5/0.0	6.0/0.0
Aerial Gunnery	3/0	4.5/0.0	6.0/0.0
Tactics	2/0	3.0/0.0	4.0/0.0
Carrier Qualification	2/0	2.0/0.0	4.0/0.0
TOTAL FOR PHASE	10/0	14.0/0.0	20.0/0.0
COMBINED TOTALS	10	14.0	20.0
ACCUMULATION FOR BASIC/TRANSITION POI	36	51.5	95.0

4. Full Combat Qualification Phase

<u>STAGE</u>	NO. EVENTS	NO. HOURS	CRP
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Air-to-Air Gunnery	1/0	1.5/0.0	1.0/0.0
Nuclear, Biological & Chemical	1/0	1.0/0.0	0.5/0.0
Carrier Qualification	1/0	1.0/0.0	0.5/0.0
Defensive Air Combat Maneuvers	6/0	6.5/0.0	3.0/0.0
TOTAL FOR PHASE	9/0	10.0/0.0	5.0/0.0
COMBINED TOTALS	9	10.0	5.0
TOTAL FOR BASIC/TRANSITION POI	45	61.5	100.0

222. FLIGHT TRAINING FOR CONVERSION CREW CHIEF1. Combat Capable Phase

<u>STAGE</u>	NO. EVENTS	NO. HOURS
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Familiarization	3/0	4.5/0.0
Formation	2/0	3.0/0.0
Terrain Flight	1/0	1.5/0.0
Navigation	1/0	1.5/0.0
Aerial Gunnery	1/0	1.5/0.0
Confined Area Landings	2/0	3.0/0.0
External Weight	1/0	1.5/0.0
Combat Capable Evaluation	1/0	1.5/0.0
TOTAL FOR PHASE	12/0	18.0/0.0
COMBINED TOTALS	12	18.0
ACCUMULATION FOR CONVERSION POI	12	18.0

2. Combat Ready Phase

<u>STAGE</u>	NO. EVENTS	NO. HOURS
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Field Carrier Landing Practice	2/0	2.0/0.0
Terrain Flight/Navigation	2/0	3.0/0.0
Confined Area Landings	3/0	4.5/0.0
Aerial Gunnery	6/0	9.0/0.0
Escort	1/0	1.5/0.0
Night Systems	1/0	1.5/0.0
Tactics	1/0	1.5/0.0
TOTAL FOR PHASE	16/0	23.0/0.0
COMBINED TOTALS	16	23.0
ACCUMULATION FOR CONVERSION POI	28	41.0

3. Combat Qualification Phase

<u>STAGE</u>	NO. EVENTS	NO. HOURS
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Advanced Night Systems Qualification	2/0	3.0/0.0
Aerial Gunnery	3/0	4.5/0.0
Escort	1/0	1.5/0.0
Tactics	2/0	3.0/0.0
Carrier Qualification	2/0	2.0/0.0
TOTAL FOR PHASE	10/0	14.0/0.0
COMBINED TOTALS	10	14.0
ACCUMULATION FOR CONVERSION POI	38	55.0

4. Full Combat Qualification Phase

<u>STAGE</u>	NO. EVENTS	NO. HOURS
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Helicopter Insertion/Extraction (HIE)	6/0	6.0/0.0
Air-to-Air Gunnery	1/0	1.5/0.0
Nuclear, Biological, & Chemical	1/0	1.5/0.0
Carrier Qualification	1/0	1.5/0.0
Defensive Air Combat Maneuvers	6/0	6.5/0.0
TOTAL FOR PHASE	15/0	17.0/0.0
COMBINED TOTALS	15	17.0
TOTAL FOR CONVERSION POI	53	73.0

223. FLIGHT TRAINING FOR CONVERSION AERIAL OBSERVER1. Combat Capable Phase

<u>STAGE</u>	NO. EVENTS	NO. HOURS
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Familiarization	1/0	1.5/0.0
Formation	2/0	3.0/0.0
Terrain Flight	1/0	1.5/0.0
Navigation	1/0	1.5/0.0
Aerial Gunnery	1/0	1.5/0.0
Confined Area Landings	2/0	3.0/0.0
Combat Capable Evaluation	1/0	1.5/0.0
TOTAL FOR PHASE	9/0	14.5/0.0
COMBINED TOTALS	9	14.5
ACCUMULATION FOR CONVERSION AO POI	9	14.5

2. Combat Ready Phase

<u>STAGE</u>	NO. EVENTS	NO. HOURS
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Field Carrier Landing Practice	2/0	2.0/0.0
Terrain Flight/Navigation	2/0	3.0/0.0
Confined Area Landings	2/0	3.0/0.0
Aerial Gunnery	6/0	9.0/0.0
Night Systems	1/0	1.5/0.0
Tactics	1/0	1.5/0.0
TOTAL FOR PHASE	14/0	20.0/0.0
COMBINED TOTALS	14	20.0
ACCUMULATION FOR CONVERSION AO POI	23	34.5

3. Combat Qualification Phase

<u>STAGE</u>	NO. EVENTS	NO. HOURS
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Advanced Night Systems Qualification	2/0	3.0/0.0
Aerial Gunnery	3/0	4.5/0.0
Tactics	2/0	3.0/0.0
Carrier Qualification	2/0	2.0/0.0
TOTAL FOR PHASE	9/0	12.5/0.0
COMBINED TOTALS	9	12.5
ACCUMULATION FOR CONVERSION AO POI	32	47.0

4. Full Combat Qualification Phase

STAGE	NO. EVENTS ACFT/SIM	NO. HOURS ACFT/SIM
Air-to-Air Gunnery	1/0	1.5/0.0
Nuclear, Biological, & Chemical	1/0	1.5/0.0
Carrier Qualification	1/0	1.0/0.0
Defensive Air Combat Maneuvers	6/0	6.5/0.0
TOTAL FOR PHASE	9/0	10.5/0.0
COMBINED TOTALS	9	10.5
TOTAL FOR CONVERSION AO POI	41	57.5

224. FLIGHT TRAINING FOR REFRESHER CREW CHIEF1. Combat Capable Phase

STAGE	NO. EVENTS ACFT/SIM	NO. HOURS ACFT/SIM
Familiarization	3/0	4.5/0.0
Formation	1/0	1.5/0.0
Terrain Flight	1/0	1.5/0.0
Navigation	1/0	1.5/0.0
Aerial Gunnery	1/0	1.5/0.0
Confined Area Landings	1/0	1.5/0.0
Combat Capable Evaluation	1/0	1.5/0.0
TOTAL FOR PHASE	9/0	13.5/0.0
COMBINED TOTALS	9	13.5
ACCUMULATION FOR REFRESHER POI	9	13.5

2. Combat Ready Phase

STAGE	NO. EVENTS ACFT/SIM	NO. HOURS ACFT/SIM
Field Carrier Landing Practice	2/0	2.0/0.0
Terrain Flight/Navigation	1/0	1.5/0.0
Confined Area Landings	2/0	3.0/0.0
Aerial Gunnery	3/0	4.5/0.0
Night Systems	1/0	1.5/0.0
Tactics	1/0	1.5/0.0
TOTAL FOR PHASE	10/0	14.0/0.0
COMBINED TOTALS	10	14.0
ACCUMULATION FOR REFRESHER POI	19	27.5

3. Combat Qualification Phase

STAGE	NO. EVENTS ACFT/SIM	NO. HOURS ACFT/SIM
Advanced Night Systems Qualification	1/0	1.5/0.0
Aerial Gunnery	3/0	4.5/0.0
Escort	1/0	1.5/0.0
Tactics	1/0	1.5/0.0
Carrier Qualification	2/0	2.0/0.0
TOTAL FOR PHASE	8/0	11.0/0.0
COMBINED TOTALS	8	11.0
ACCUMULATION FOR REFRESHER POI	27	38.5

4. Full Combat Qualification Phase

<u>STAGE</u>	NO. EVENTS	NO. HOURS
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Helicopter Insertion/Extraction (HIE)	6/0	6.0/0.0
Air-to-Air Gunnery	1/0	1.5/0.0
Nuclear, Biological, & Chemical	1/0	1.5/0.0
Carrier Qualification	1/0	1.0/0.0
Defensive Air Combat Maneuvers	6/0	6.5/0.0
TOTAL FOR PHASE	15/0	16.5/0.0
COMBINED TOTALS	15	16.5
TOTAL FOR REFRESHER POI	42	55.0

225. FLIGHT TRAINING FOR REFRESHER AERIAL OBSERVER1. Combat Capable Phase

<u>STAGE</u>	NO. EVENTS	NO. HOURS
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Familiarization	1/0	1.5/0.0
Formation	2/0	3.0/0.0
Terrain Flight	1/0	1.5/0.0
Navigation	1/0	1.5/0.0
Aerial Gunnery	1/0	1.5/0.0
Confined Area Landings	1/0	1.5/0.0
Combat Capable Evaluation	1/0	1.5/0.0
TOTAL FOR PHASE	8/0	12.0/0.0
COMBINED TOTALS	8	12.0
ACCUMULATION FOR REFRESHER AO POI	8	12.0

2. Combat Ready Phase

<u>STAGE</u>	NO. EVENTS	NO. HOURS
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Field Carrier Landing Practice	2/0	2.0/0.0
Terrain Flight/Navigation	1/0	1.5/0.0
Confined Area Landings	1/0	1.5/0.0
Aerial Gunnery	3/0	4.5/0.0
Night Systems	1/0	1.5/0.0
Tactics	1/0	1.5/0.0
TOTAL FOR PHASE	9/0	12.5/0.0
COMBINED TOTALS	9	12.5
ACCUMULATION FOR REFRESHER AO POI	17	24.5

3. Combat Qualification Phase

<u>STAGE</u>	NO. EVENTS	NO. HOURS
	<u>ACFT/SIM</u>	<u>ACFT/SIM</u>
Advanced Night Systems Qualification	1/0	1.5/0.0
Aerial Gunnery	3/0	4.5/0.0
Tactics	1/0	1.5/0.0
Carrier Qualification	2/0	2.0/0.0
TOTAL FOR PHASE	7/0	9.5/0.0
COMBINED TOTALS	7	9.5
ACCUMULATION FOR REFRESHER AO POI	24	34.0

4. Full Combat Qualification Phase

STAGE	NO. EVENTS	NO. HOURS
	ACFT/SIM	ACFT/SIM
Air-to-Air Gunnery	1/0	1.5/0.0
Nuclear, Biological, & Chemical	1/0	1.5/0.0
Deck Landing Qualification	1/0	1.0/0.0
Defensive Air Combat Maneuvers	6/0	6.5/0.0
TOTAL FOR PHASE	9/0	10.5/0.0
COMBINED TOTALS	9	10.5
ACCUMULATION FOR REFRESHER AO POI	33	44.5

226. FLIGHT TRAINING FOR INSTRUCTOR CREW CHIEF

STAGE	NO. EVENTS	NO. HOURS
	ACFT/SIM	ACFT/SIM
Instructor Crew Chief	2/0	3.0/0.0
TOTAL	2	3.0

227. GRADUATE LEVEL COURSES. There are six graduate level courses that qualify instructors for specific portions of the T&R syllabus. Requirements for instructor certification are contained in the MAWTS-1 Course Catalog.

228. SIMULATOR TRAINING. Although a current flight simulator for crew chiefs or AOs does not exist, a request is in process.

229. EVENT TRAINING. The aircraft is used for those events designated with an "A" and the flight simulator is used for those events designated with an "S." To give commanding officers the maximum amount of flexibility for training, some events allow for the optional use of simulators or aircraft. Those events will use "A/S" for aircraft preferred, simulator optional and "S/A" for simulator preferred, aircraft optional.

230. FLIGHT/SIMULATOR PERFORMANCE REQUIREMENTS1. General

a. This Manual generalizes mission guidance to allow for varying local conditions and allows this Manual to remain unclassified. DC AVN and CG MCCDC encourage squadrons to use the full range of tactics in tactical manuals and adopt the latest developed and proven tactics.

b. This Manual designs the Combat Capable phase for an instructor and trainee to maximize training and to minimize syllabus support hours.

c. All events shall terminate with a comprehensive debrief with emphasis on aircrew performance using all evaluation techniques.

d. Aircrew shall fly events annotated with an "N" at least 30 minutes after official sunset. Aircrew may fly events annotated with "(N)" at night.

e. Aircrew shall fly events annotated with an "NS" with NVGs for the entire flight. Aircrew may fly events annotated with "(NS)" using NVGs.

f. Crew Chief Under Instruction (CCUI) shall complete the appropriate FRS ground school instruction prior to commencement of flight training.

2. Squadron Syllabus Assignment

a. Basic Crew Chiefs and Aerial Observers. Basic Crew Chiefs (CC) and Aerial Observers (AO) will be assigned to fly the entire syllabus. Transition CCs and AOs shall fly the basic syllabus. Conversion and Refresher CCs and AOs will fly those events designated by a "C" or "R" respectively in the flight description. The squadron training officer shall enter all Aircrew Training Forms (ATFs) in section 3 of the APR. These ATFs will replace ATFs previously entered in section 3. Figures 2-2/2-3 show refly interval and Combat Readiness Percentage (CRP).

b. Secondary MOS CCs. To alleviate inventory shortages of primary MOS crew chiefs, authority is granted to individual unit commanders to train and designate personnel as secondary MOS 6174 only. The source population is restricted to personnel that are from within the 61xx occupational field. Waivers for other MOSs may be requested via DC AVN (ASM) on a case-by-case basis.

(1) The number of secondary MOS CCs that a unit commander is authorized to designate is limited to the current staffing formula, $1.6 \text{ CC} \times \text{PAA} = \text{\#CCs}$, minus primary designated CCs assigned. On-hand primary MOS CCs shall have priority for crewmember orders and hazardous duty incentive pay.

(2) Secondary MOS CCs complete normal NATOPS requirements to include flight physical, physiology, and water survival prior to flight. Consideration should be made for SERE training.

(3) If secondary MOS CCs are already designated AOs they only need to complete Combat Capable phase events not previously completed. Otherwise, the entire phase must be completed.

(4) Prior to designation by the unit commander, the respective FRS instructor or MAG Enlisted NATOPS Standardization Evaluator shall certify the individual's qualification to ensure MOS standardization. This evaluation shall follow all the same procedures as a primary MOS CC evaluation IAW NATOPS.

3. Aircrew Evaluation Flights. All Aircrew shall have a NATOPS evaluation form completed upon completion of either CCX-181 or RQD-601.

4. Aircrew Training Forms (ATFs)

a. An ATF is required for any initial flight of any sortie completed by a Basic, Transition, Conversion, or Refresher pilot or as recommended by the squadron Standardization Board.

b. If the commanding officer has waived/deferred a syllabus sortie, the squadron training officer shall place a waiver/deferral letter in section 3 of the APR.

c. HMT-303 will maintain an ATF database that establishes minimum requirements for each syllabus event. Access for individual units will be possible at the HMT-303 website.

5. Instructor Requirements

a. The minimum instructor requirements are listed in the Crew Requirements section of each event.

b. CCUI may complete any flight not requiring an instructor with a CC that is proficient and qualified in that stage of training. CCI must be designated to instruct in a particular stage of training.

c. Instructors are required for any event that requires an NSI, SWDI, TERFI or DACMI.

6. Event Completion. Compliance with the written event description is mandatory for syllabus event completion. Times indicated for each event are only recommendations.

7. Sequence. Training should be accomplished by flying events within a stage in sequence and stages in sequence when practical.

8. Definitions

a. Discuss

(1) The instructor shall discuss a procedure or task during the brief, inflight, or de-brief.

(2) The CCUI is responsible for knowledge of the applicable procedures prior to briefing.

b. Demonstrate

(1) The instructor performs the task or crew function.

(2) The CCUI observes and is responsible for the knowledge of the task or crew function prior to the flight.

c. Introduce

(1) At his option, the instructor may perform the task or crew function with an accompanying description, or he may coach the CCUI without demonstration.

(2) The CCUI shall perform the task or crew function with coaching as necessary and is responsible for all applicable knowledge prior to the flight.

d. Review

(1) The instructor observes and grades the CCUI without coaching. An airborne critique of the CCUI's performance is at the option of the instructor.

(2) The CCUI is expected to perform the tasks or crew functions without coaching and be devoid of procedural error at a level acceptable to warrant progress into the next stage of training.

231. COMBAT CAPABLE PHASE

1. Purpose. To develop a Combat Capable CC/AO. At the completion of this phase the CCUI/AOUI will be designated CC/AO, NATOPS qualified and rate the 6174 MOS as specified in the CCX-181.

2. General. Completion of this phase meets the requirements for the CCUI/AOI to be designated a CC/AO. At the discretion of the squadron commanding officer a letter designating the CCUI/AOI a CC/AO shall be placed

in the NATOPS jacket, APR and a tracking code of RQRD-601 shall be logged. Proficiency will have been gained in FAM, FORM, TERF, NAV, CAL and SWD. NVDS will be utilized during the FAM, FORM, TERF, NAV and CAL stages.

3. Familiarization (FAM)

a. Purpose. To become familiar with flight characteristics, aircraft systems, limitations, and emergency procedures. Develop proficiency in assisting pilots in all aspects of FAM flight, both day and night.

b. General

(1) At the completion of this stage, the CCUI/AOUI should be able to demonstrate the ability to assist pilots in all aspects of FAM flight, both day and night.

(2) AOUI Requirement: FAM-101, FAM-115.

c. Crew Requirement. As listed at the end of each event.

d. Ground/Academic Training. UH-1N aircraft familiarization must be completed prior to flight training.

e. Flight Training. (4 Sorties, 6.0 Hours).

FAM-101 1.5 1 UH-1N A

Goal. Introduce normal ground and flight procedures.

Requirements

(1) Brief/discuss engine fire on ground and fire in the aircraft on the ground.

(2) Introduce duties of the CC to include preflight, starting, taxi, takeoff, inflight lookout, landing, and postflight procedures.

(3) Demonstrate use of ICS, voice procedures, sighting, using clock systems, and estimating distance.

Performance Standards. Display knowledge of ICS voice procedures, CC duties to include preflight, starting, taxi/takeoff, inflight, landing, all applicable emergency procedures.

Prerequisite. N/A.

Ordinance. N/A.

External Syllabus Support. N/A.

Crew. CCI/CCUI or AOUI.

FAM-102 1.5 C,R 1 UH-1N A

Goal. Introduce communications, passenger procedures, normal and emergency procedures.

Requirements

(1) Brief/discuss takeoff and landing emergencies, fire in flight, smoke elimination, ditching procedures, aircraft engine and transmission limitations.

(2) Introduce the duties of the CC during precautionary/emergency landings, including autorotations.

(3) Introduce communication/navigation equipment and CDNU. Introduce passenger brief, include passenger emergency procedures.

(4) Introduce aircraft weight and balance calculations and CC responsibilities in loading.

Performance Standards. Display knowledge of ICS voice procedures, CC duties to include preflight, starting, taxi/takeoff, inflight, landing, all applicable emergency procedures.

Prerequisite. FAM-101.

Ordinance. N/A.

External Syllabus Support. N/A.

Crew. CCI/CCUI or AOUI.

FAM-112

1.5 C,R 1 UH-1N A N

Goal. Unaided night introduction.

Requirement

(1) Review preflight, starting, taxi, takeoff, landing, postflight procedures, and aircraft radio operation.

(2) Review the duties of the CC during precautionary/emergency landings with emphasis on night operations.

(3) Introduce night preflight/postflight, aircraft lighting systems, airfield lighting/terminology, and night lookout.

Performance Standards. Display knowledge of night operations and demonstrate ability to perform CC duties in night environment.

Prerequisite. FAM-102.

Ordinance. N/A.

External Syllabus Support. N/A.

Crew. CCI/CCUI or AOUI.

FAM-115

1.5 C,R 1 UH-1N A N NS

Goal. Introduce NVD techniques during HLL.

Requirements

(1) Brief/discuss NVD preflight/adjustment/focusing, NVD eye lane, ANV-20-20 Eye Lane System Resolution Test Set use. NVD emergencies/malfunctions, aircraft emergencies while using NVDs, and aircrew coordination.

(2) Introduce the wear and use of NVDs.

Performance Standards. Display ability to perform CC duties using NVDs.

Prerequisite. FAM-112.

Ordinance. N/A.

External Syllabus Support. N/A.

Crew. NSF1 or NSI/CCUI or AOUI.

4. Formation (FORM)

a. Purpose. To become familiar with crew functions and responsibilities required during formation flying.

b. General. AOUI requirements: FORM-131, FORM-132.

c. Crew Requirement. As listed at the end of each event.

d. Ground/Academic Training. IAW FRS Trainee Guide for Crew Chief Under Instruction Training Course.

e. Flight Training. (2 Sorties, 3.0 Hours).

FORM-131

1.5

C 2 UH-1N A

Goal. Introduce tactical formations.

Requirement

(1) Brief/discuss combat cruise, combat spread, TAC turns, cross turns, split turns, and break turns.

(2) Discuss ordnance delivery patterns.

(3) Introduce CC responsibilities associated with tactical formations and maneuvers.

(4) Review hand and arm signals, lookout procedures, and CC responsibilities associated with formation flying.

Performance Standards. Display thorough knowledge of tactical formation maneuvers. Demonstrate proficiency assisting pilots in tactical formation maneuvers.

Prerequisite. FAM-102.

Ordinance. N/A.

External Syllabus Support. N/A.

Crew. CCI/CCUI or AOUI.

FORM-132 1.5 C,R 2 UH-1N A N NS

Goal. NVD FORM introduction.

Requirement. Review hand and arm signals, lookout procedures, and CC responsibilities associated with formation flying at night.

Performance Standards. Demonstrate proficiency assisting pilots in night formation maneuvers.

Prerequisite. FAM-115, FORM-131.

Ordinance. N/A.

External Syllabus Support. N/A.

Crew. NSF1 or NSI/CCUI or AOUI.

5. Terrain Flight (TERF)

a. Purpose. To develop aircrew coordination required during TERF.

b. General

(1) At the completion of this stage, the CCUI/AOUI will be able to demonstrate the ability to assist the pilot in TERF.

(2) AOUI requirement: TERF-140, TERF-141.

c. Crew Requirement. As listed at the end of each event.

d. Ground/Academic Training. IAW FRS Trainee Guide for Crew Chief Under Instruction Training Course

e. Flight Training. (2 Sorties, 3.0 Hours).

TERF-140 1.5 1 UH-1N A

Goal. Introduce TERF techniques.

Requirement

(1) Brief/discuss aircraft clearance and aircraft emergencies during TERF altitudes.

(2) Introduce blade walk, power checks, masking/unmasking, NOE quickstops, bunt, roll, low level, contour, and NOE profiles emphasizing vertical relief of the earth and vegetation.

Performance Standards. Display knowledge and ability to assist pilots in TERF environment.

Prerequisite. FAM-102.

Ordinance. N/A.

External Syllabus Support. N/A.

Crew. TERFI/CCUI or AOUI.

TERF-142

1.5

C,R 1 UH-1N A N NS

Goal. Introduce TERF techniques using NVDs.

Requirement

(1) Brief/discuss NVD considerations in the TERF environment.

(2) Introduce blade walk, power checks, masking/unmasking, NOE quickstops, bunt, roll, low level, contour, and NOE profiles emphasizing vertical relief of the earth and vegetation with NVGs.

Performance Standards. Display knowledge and ability to assist pilots in TERF environment while using NVDs.

Prerequisite. FAM-115, TERF-140.

Ordinance. N/A.

External Syllabus Support. N/A.

Crew. NSFII or NSI/CCUI or AOUI.

6. Navigation Flight (NAV)

a. Purpose. To become familiar with crew functions and responsibilities while navigating without use of radio navigational aids.

b. General

(1) At the completion of this stage, the CCUI/AOUI will be able to demonstrate the ability to assist the pilots in all phases of inflight navigation.

(2) AOUI requirement. NAV-152.

c. Crew Requirement. As listed at the end of each event.

d. Ground/Academic Training. IAW FRS Trainee Guide for Crew Chief Under Instruction Training Course.

e. Flight Training. (2 Sorties, 3.0 Hours).

NAV-151

1.5

1 UH-1N

Goal. Introduce aircrew duties during TERF navigation.

Requirement

(1) Review lookout and aircrew coordination required during TERF.

(2) Introduce the use of checkpoints, time distance checks, barrier features, prominent terrain features, map legend, and map preparation.

Performance Standards. Display ability to assist pilots in TERF navigation.

Prerequisite. FAM-102 and TERF-140.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. CCI/CCUI or AOUI.

NAV-152

1.5 C,R 1 UH-1N N NS

Goal. Introduce night navigation on NVDs.

Requirement

(1) Brief/discuss HLL, LLL, effects of moon angle and meteorological effects on NVDs.

(2) Introduce the use of checkpoints, time distance checks, barrier features and prominent terrain features while using NVDs and NVD map preparation.

Performance Standards. Display knowledge and ability to assist pilots in navigation while using NVDs.

Prerequisite. FAM-115.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. NSFII or NSI/CCUI or AOUI.

7. Specific Weapons Delivery (SWD)

a. Purpose. To familiarize the aircrew with the procedures required to provide fire on targets of opportunity.

b. General

(1) At the completion of this stage, the CCUI/AOUI will be able to demonstrate knowledge of weapons systems and ordnance delivery with crew served weapons.

(2) AOUI requirements: SSWD-160 and SWD-161.

c. Crew Requirement. As listed at the end of each event.

d. Ground/Academic Training. IAW FRS Trainee Guide for Crew Chief Under Instruction Training Course.

e. Simulator Training. (1 Event, 1.0 Hour).

f. Flight Training. (1 Sortie, 1.5 Hours).

SSWD-1601.0S

Goal. Introduce weapons and checklist procedures.

Requirement. Introduce ordnance loading, preflight, operations, postflight, safety procedures, weapons conditions and ordnance weapons checklist. When range is available for simulator, practice firing on prebriefed targets with crew served weapons, stressing aircrew coordination and weapons safety.

Performance Standards. Display knowledge and ability to safely employ crew served weapons IAW applicable checklists.

Prerequisite. N/A.

Ordnance. 1500 rds GAU-17 or 300 rds GAU-16 or 400 rds M-240.

External Syllabus Support. UH-1N Deck Simulator Assembly.

Crew. SWDI/CCUI or AOUI.

SWD-1611.5C,R 1 UH-1N A

Goal. Introduce aerial gunnery training.

Requirement

(1) Discuss attack patterns, section operations, sighting procedures, malfunction/stoppage procedures and WORM formula.

(2) Demonstrate/introduce ordnance loading, preflight, operations, postflight, safety procedures, weapons conditions and ordnance weapons checklist.

(3) Practice firing on prebriefed targets with crew served weapons, stressing aircrew coordination and weapons safety.

Performance Standards. Display knowledge and ability to safely employ crew served weapons IAW applicable checklists.

Prerequisite. FAM-102, SSWD-160.

Ordnance. 1500 rds GAU-17 or 300 rds GAU-16 or 400 rds M-240.

External Syllabus Support. N/A.

Crew. SWDI/CCUI or AOUI.

8. Confined Area Landings (CAL)

a. Purpose. To become familiar with crew responsibilities during operations in confined areas. All aspects of aircrew coordination shall be thoroughly briefed.

b. General

(1) At the completion of this stage, the CCUI/AOUI will be able to demonstrate the ability to assist the pilot in all aspects of CALs.

(2) AOUI requirements: CAL-171, CAL-172.

c. Crew Requirement. As listed at the end of each event.

d. Ground/Academic Training. IAW FRS Trainee Guide for Crew Chief Under Instruction Training Course.

e. Flight Training. (3 Sorties, 4.5 Hours).

<u>CAL-170</u>	<u>1.5</u>	<u>1 UH-1N A</u>
<u>Goal</u> . Introduce confined area operations, to include HIE approaches.		
<u>Requirement</u>		
(1) Brief/discuss power settling, landing zone brief, dynamic rollover, slope landings and aircrew coordination.		
(2) Introduce lookout procedures required to assist the pilot when operating in a confined area, HIE approaches stressing safety procedures, aircraft clearance from obstacles, and terrain suitability.		
<u>Performance Standards</u> . Display ability to safely conduct CALs and HIE approaches IAW NATOPS.		
<u>Prerequisite</u> . FAM-102.		
<u>Ordinance</u> . N/A.		
<u>External Syllabus Support</u> . N/A.		
<u>Crew</u> . CCI/CCUI or AOUI.		
<u>CAL-171</u>	<u>1.5</u>	<u>C 1 UH-1N A</u>
<u>Goal</u> . Introduce tactical CAL approaches.		
<u>Requirement</u>		
(1) Brief/discuss threat conditions, tactical approaches and departures. Reference UH-1N Tactical Manual.		
(2) Introduce procedures required to assist the pilot when operating in a low to high threat environment. Stress safety procedures, aircraft clearance from obstacles, and terrain suitability.		
<u>Performance Standards</u> . Display ability to safely conduct tactical CALs and HIE approaches IAW NATOPS.		
<u>Prerequisite</u> . CAL-170.		
<u>Ordinance</u> . N/A.		
<u>External Syllabus Support</u> . N/A.		
<u>Crew</u> . CCI/CCUI or AOUI.		

CAL-1721.5C,R 1 UH-1N A N NS

Goal. Introduce night unaided to aided CALs.

Requirement

(1) Brief/discuss brown/white out and the effects of moisture; emphasize aircrew coordination.

(2) Introduce procedures required to assist the pilot when operating in a confined area at night. Stress safety procedures, aircraft clearance from obstacles, terrain suitability, and the use of ground lighting systems.

Performance Standards. Display ability to safely conduct CALs and HIE approaches IAW NATOPS while using NVDs.

Prerequisite. FAM-115, CAL-170.

Ordinance. N/A.

External Syllabus Support. N/A.

Crew. NSFII or NSI/CCUI or AOUI.

9. External Weights (EXT)

a. Purpose. To introduce the CCUI to operations while using the hook and hoist.

b. General. At the completion of this stage, the CCUI will be able to demonstrate knowledge and ability to safely conduct hook/hoist operations.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. IAW FRS Trainee Guide for Crew Chief Under Instruction Training Course.

e. Flight Training. (1 Sortie, 1.5 Hours).

EXT-1751.5C UH-1N A

Goal. Introduce external load/hoist procedures.

Requirement

(1) Brief/discuss aircrew coordination, hand and arm signals, ICS terminology, hook/hoist limitations/malfunctions, load release, and emergency procedures.

(2) Brief/discuss the use of Chicago grip, quick splice, and cable cutters.

(3) Introduce

(a) Operational check of hoist/hook.

(b) Use of rescue strop and jungle penetrator.

(c) Cargo hook pendant and manual release.

(d) Emergency procedures for external hook/rescue hoist.

(4) Conduct at least two hook-up, flight and release operations for cargo hook. Two hoisting operations using a suitable weight.

Performance standards. Demonstrate proper ICS terminology, hook/hoist operation and installation.

Prerequisite. FAM-102.

Ordinance. N/A.

External Syllabus Support. N/A.

Crew. CCI/CCUI or AOUI.

10. Crew Chief/Aerial Observer Combat Capable Check (CCX)

a. Purpose. To evaluate proficiency in the performance of Combat Capable CC/AO duties per UH-1N NATOPS Manuals.

b. General. Completion of this stage meets the requirements for designation as a CC and MOS 6174 or AO. This sortie will serve as the initial NATOPS Evaluation.

c. Crew Requirements. Initial CCX-181 for CCUI must be conducted by FRS or NATOPS Evaluator. Initial CCX-181 for AOUI may be conducted by squadron NATOPS Instructor/Assistant NATOPS Instructor.

d. Ground/Academic Training. Open and closed book tests must be successfully completed per appropriate UH-1N NATOPS Flight Manuals prior to Combat Capable evaluation flight.

e. Flight Training. (1 Sortie, 1.5 Hours).

<u>CCX-181</u>	<u>1.5</u>	<u>C,R E 1 UH-1N A</u>
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Goal. Combat Capable Check.

Requirement. Conduct a CC/AO NATOPS evaluation per criteria in the UH-1N NATOPS manuals.

Performance Standards. IAW NATOPS Flight Manual.

Prerequisite. Combat Capable phase complete.

Ordinance. N/A.

External Syllabus Support. N/A.

Crew. ANI/CCUI or AOUI.

232. COMBAT READY PHASE

1. Purpose. To produce a TERF/CAL and NSQ (HLL) qualified CC/AO.

2. General

a. After completing CAL-223, a TERF/CAL qualification letter signed by the commanding officer shall be placed in the NATOPS with a copy in the APR and a flight logbook entry.

b. After completing TAC-261, a NSQ (HLL) qualification letter signed by the commanding officer shall be placed in the NATOPS with a copy in the APR and a flight logbook entry.

c. All NS flights in this phase of training shall be flown under HLL conditions.

3. Ground Training. Requirements are listed per stage of flight and must be completed prior to the associated stage of flight.

4. Field Carrier Landing Practice (FCLP)

a. Purpose. To introduce and develop the aircrew coordination required for flight operations from a carrier deck or air capable ship day and night by introducing FCLPs.

b. General

(1) The CCUI/AOUI will become familiar with those procedures required for shipboard operations. Refer to LHA, LHD and LPD NATOPS and NWP-42 for shipboard operations.

(2) Minimum of 5 landings for each FCLP.

(3) AOUI requirement: FCLP-201, FCLP-202.

c. Ground/Academic Training. Review required equipment for shipboard/over-water operations.

d. Crew Requirement. As listed at the end of each event.

e. Flight Training. (2 Sorties, 2.0 Hours).

FCLP-201 1.0 C,R 1 UH-1N A

Goal. Introduce day FCLPs.

Requirement. Introduce day FCLP patterns, approaches, and landings. Brief and discuss flight deck procedures, LSE signals, emergency/ditching procedures, and raft usage.

Performance Standards. Demonstrate the ability/knowledge to perform shipboard flight operations to include LSE hand and arm signals.

Prerequisite. CCX-181.

Ordinance. N/A.

External Syllabus Support. Approved FCLP landing pad.

Crew. CCI/CCUI or AOUI.

FCLP-202 1.0 C,R 1 UH-1N A N NS

Goal. Introduce night and NVD FCLPs.

Requirement. Introduce night, unaided and aided FCLP patterns and landings. Brief and discuss flight deck procedures, LSE signals, emergency/ditching procedures, and raft usage.

Performance Standards. Demonstrate the ability/knowledge to perform unaided and aided shipboard flight operations to include LSE hand and arm signals.

Prerequisite. FCLP-201

External Syllabus Support. Lit/NVD compatible FCLP landing pad.

Crew. NSI/CCUI or AOUI.

5. Terrain Flight/Navigation (TERF)

a. Purpose

(1) To become proficient with crew functions and responsibilities while navigating without the use of radio navigational aids at TERF altitudes.

(2) To become familiar with CC responsibilities during formation flight in the TERF environment.

b. General. AOUI Requirement: TERF-210, 211.

c. Crew Requirement. As listed at the end of each event.

d. Ground/Academic Training. Review the appropriate section of the UH-1N MAWTS-1 Academic Support Package lectures.

e. Flight Training. (2 Sorties, 3.0 Hours).

TERF-210 1.5 C 1 UH-1N A

Goal. Review TERF maneuvers and navigation.

Requirement

(1) Review the use of checkpoints, time distance checks, barrier features, prominent terrain features, map legend, map preparation, hand and arm signals.

(2) Introduce flight in the low level, contour and NOE profiles.

(3) Flight to be completed in contour/NOE mode.

Performance Standards. Demonstrate the ability to perform and understand TERF navigation.

Prerequisite. CCX-181.

Ordinance. N/A.

External Syllabus Support. N/A.

Crew. TERFI/CCUI or AOUI.

TERF-211

1.5

C,R 2 UH-1N A N NS

Goal. Review TERF navigation while using NVDs.

Requirement

(1) Demonstrate lookout procedures required to assist the pilot when operating in a TERF environment. Stress safety procedures, aircraft clearance from obstacles, and terrain suitability while using NVDs.

(2) Demonstrate the use of checkpoints, time distance checks, barrier features, prominent terrain features, map legend, and map preparation while using NVDs.

(3) Review use of AVN-20-20 Eye Lane System Resolution Test Set.

Performance Standards. Demonstrate the ability to safely execute TERF navigation while using NVDs.

Prerequisite. TERF-210.

Ordinance. N/A.

External Syllabus Support. N/A.

Crew. NSI/CCUI or AOUI.

6. Night Systems (NS)

a. Purpose. To develop the ability to use thermal imaging to increase situational awareness, aircrew coordination, and gain familiarity with laser range finding.

b. General

(1) The CCI shall be familiar with the use of the Night Thermal Imaging System (NTIS). The CCUI and AOUI will safely conduct operational tasks prior to and during NTIS operations.

(2) AOUI Requirement: NS-215.

c. Crew Requirement. As listed at the end of each event.

d. Ground/Academic Training. To be accomplished prior to any flight training in this phase. Review the UH-1N Tactical Manual, Chapter 23 (NTIS), MAWTS-1 Laser Safety Lecture.

e. Flight Training. (1 Sortie, 1.5 Hours).

NS-215

1.5

C,R 1 UH-1N A N NS

Goal. Familiarize the CCUI and AOUI with terminology, preflight, postflight, switchology and flight operation of NTIS.

Requirement

(1) Discuss terminology, Laser Safety procedures and specific aircrew training issues during NTIS operations.

(2) Demonstrate a thorough understanding of the NTIS, its components (TFU, CEU, HCU, VDU, and VCR), NTIS power-up procedures and knowledge of operations.

Performance Standards. Demonstrate basic knowledge and understanding of FLIR/NTIS operations.

Prerequisite. TERF-211.

Ordinance. N/A.

External Syllabus Support. N/A.

Crew. NSI/CCUI or AOUI.

7. Confined Area Landings (CAL)

a. Purpose

(1) To develop aircrew coordination when operating in a confined area.

(2) To develop proficiency to conduct operations while using NVDs.

b. General

(1) After successfully completing CAL-223, a TERF/CAL qualification letter signed by the commanding officer shall be placed in the NATOPS with a copy in the APR and a flight log book entry.

(2) AOUI requirement: CAL-220, 223.

c. Crew Requirement. As listed at the end of each event.

d. Ground/Academic Training. NA.

e. Flight Training. (3 Sorties, 4.5 Hours).

CAL-220 1.5 C 2 UH-1N A

Goal. Introduce section CAL operations and HIE approaches.

Requirement

(1) Review procedures to assist the pilot when operating in a confined area.

(2) Review formation and lookout procedures stressing responsibilities during section operations.

Performance Standards. Demonstrate the ability to assist pilots in operating in a confined area to include proper crew coordination, aircraft clearance, and wingman awareness.

Prerequisite. TERF-210.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. TERFI/CCUI or AOUI.

CAL-221

1.5 C,R 2 UH-1N A N NS

Goal. Introduce section CAL operations and HIE approaches while using NVDS.

Requirement

(1) Review procedures to assist the pilot when operating in confined areas with NVDS.

(2) Introduce crew responsibilities relative to section operations while using NVDS.

Performance Standards. Demonstrate the ability to assist pilots during section operations in confined areas and HIE approaches while using NVDS.

Prerequisite. TERF-211 and CAL-220.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. NSI/CCUI or AOUI.

CAL-223

1.5 C,R 2 UH-1N A N NS

Goal. Display proficiency during section CAL operations and HIE approaches while using NVDS.

Requirement

(1) Review procedures to assist the pilot when operating in confined areas with NVDS.

(2) Introduce crew responsibilities relative to section operations while using NVDS.

Performance Standards. Display proficiency during section operations in confined areas and HIE approaches while using NVDS.

Prerequisite. CAL-221.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. NSI/CCUI or AOUI.

8. Specific Weapons Delivery (SWD)

- a. Purpose. To develop proficiency in conducting SWD ordnance delivery.

b. General

(1) Upon successful completion of this stage the CCUI/AOUI will be able to demonstrate knowledge of weapons systems and proficiency in BCWD with crew served weapons. Each flight in this stage will be completed with appropriate documentation to include ATFs with round counts.

(2) AOUI Requirements. SWD-240 through SWD-245.

(3) Section operations should be used if available.

(4) Weapon mounted lasers should be used for all NVD flights.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. Review MAWTS-1 Academic Support Package lectures, Aerial Gunnery Manual and applicable weapons checklist. Prior to commencing each flight, the CCUI/AOUI shall receive appropriate ground training by an aerial gun instructor for the respective weapon and laser usage.

e. Flight Training. (6 Sorties, 9.0 Hours).

SWD-240 1.5 C 1 UH-1N A

Goal. Introduce GAU-16, .50 caliber machine gun.

Requirement. Introduce ordnance loading, preflight, operations, postflight, and safety procedures associated with ordnance evolutions. Practice firing on prebriefed targets with crew served weapons while stressing aircrew coordination.

Performance Standards. Demonstrate basic knowledge of nomenclature, cycle of operation and ability to safely and effectively employ the GAU-16.

Prerequisite. SWD-161, CAL-220.

Ordnance. 300 rds .50 cal GAU-16.

External Syllabus Support. N/A.

Crew. SWDI/CCUI or AOUI.

SWD-241 1.5 C 1 UH-1N A

Goal. Introduce GAU-17.

Requirement. Introduce ordnance loading, preflight, operations, postflight, and safety procedures associated with ordnance evolutions. Practice firing on prebriefed targets with crew served weapons while stressing aircrew coordination.

Performance Standards. Demonstrate basic knowledge of nomenclature, cycle of operation and ability to safely and effectively employ the GAU-17.

Prerequisite. SWD-161, CAL-220.

Ordnance. 1500 rds 7.62 mm GAU-17.

External Syllabus Support. N/A.

Crew. SWDI/CCUI or AOUI.

SWD-242

1.5 C 1 UH-1N A

Goal. Introduce M-240.

Requirement. Introduce ordnance loading, preflight, operations, postflight, and safety procedures associated with ordnance evolutions. Practice firing on prebriefed targets with crew served weapons stressing aircrew coordination.

Performance Standards. Demonstrate basic knowledge of nomenclature, cycle of operation and ability to safely and effectively employ the M-240.

Prerequisite. SWD-161, CAL-220.

Ordnance. 400 rds 7.62 mm M-240.

External Syllabus Support. N/A.

Crew. SWDI/CCUI or AOUI.

SWD-243

1.5 C,R 1 UH-1N A N NS

Goal. Introduce GAU-16 gunnery while using NVDs.

Requirement. Introduce ordnance loading, preflight, operations, postflight, and safety procedures associated with ordnance evolutions. Practice firing on prebriefed targets with crew served weapons, stressing aircrew coordination while using NVDs.

Performance Standards. Demonstrate detailed knowledge of nomenclature, cycle of operation, BCWD and ability to safely and effectively employ the GAU-16 while using NVDs.

Prerequisite. CAL-223, SWD-240.

Ordnance. 300 rds .50 cal GAU-16.

External Syllabus Support. N/A.

Crew. NSI/CCUI or AOUI.

SWD-244

1.5 C,R 1 UH-1N A N NS

Goal. Introduce GAU-17 gunnery while using NVDs.

Requirement. Introduce ordnance loading, preflight, operations, postflight, and safety procedures associated with ordnance evolutions. Practice firing on prebriefed targets with crew served weapons, stressing aircrew coordination while using NVDs.

Performance Standards. Demonstrate detailed knowledge of nomenclature, cycle of operation, BCWD and ability to safely and effectively employ the GAU-17 while using NVDs.

Prerequisite. CAL-223, SWD-241.

Ordnance. 1500 rds 7.62 mm GAU-17.

External Syllabus Support. N/A.

Crew. NSI/CCUI or AOUI.

SWD-245 1.5 C,R 1 UH-1N A N NS

Goal. Introduce M-240 gunnery while using NVDs.

Requirement. Introduce ordnance loading, preflight, operations, postflight, and safety procedures associated with ordnance evolutions. Practice firing on prebriefed targets with crew served weapons, stressing aircrew coordination while using NVDs.

Performance Standards. Demonstrate detailed knowledge of nomenclature, cycle of operation, BCWD and ability to safely and effectively employ the M-240 while using NVDs.

Prerequisite. CAL-223, SWD-242.

Ordnance. 400 rds 7.62 mm M-240.

External Syllabus Support. N/A.

Crew. NSI/CCUI or AOUI.

9. Escort (ESC)

a. Purpose. To develop proficiency in CC and SWD duties during heliborne or surface escort formations and maneuvers per current tactical doctrine.

b. General. Aircrew will develop a working knowledge of escort formations, maneuvers, and responsibilities associated with heliborne operations.

c. Crew Requirement. As listed at the end of each event.

d. Ground/Academic Training. Review the MAWTS-1 Course Catalog Section IV, UH-1N, Escort for appropriate courses.

e. Ordnance. Ordnance is optional for this stage of training.

f. Flight Training. (1 Sortie, 1.5 Hours).

ESC-250 1.5 C 2 OR MORE ACFT A (N)(NS)

Goal. Introduce helicopter escort procedures (day or night).

Requirement

(1) Discuss escort flight aircrew responsibilities.

(2) Introduce basic escort principles, formations, techniques and responsibilities per tactical doctrine for helicopters and surface vehicles.

(3) Brief and review lookout doctrine and sectors of fire.

Performance Standards. Demonstrate the ability to safely and effectively employ crew served weapons while operating as escort aircraft.

Prerequisite. CAL-223. If flown at night with ordnance, one of the following: SWD-243, SWD-244, or SWD-245.

Ordnance. 1500 rds 7.62 mm GAU-17, 300 rounds .50 Cal GAU-16, 400 rds 7.62 mm M-240.

External Syllabus Support. Two or more assault helicopters.

Crew. SWDI (NSI)/CCUI or AOUI.

10. Tactics (TAC)

a. Purpose. To develop aircrew coordination required for tactical missions, to be flown under HLL.

b. General

(1) At the completion of this stage, the CCUI/AOUI will be able to demonstrate the ability to assist the pilot in the conduct of a tactical mission. Completion of this stage meets the requirements for qualification as Night Systems Qualified High Light Level [NSQ (HLL)]. A qualification letter shall be placed in the NATOPS Jacket with a copy in the APR and a flight logbook entry. These flights shall be conducted IAW MCO 3501.4, MCCRES, Volume III, Section C.

(2) AOUI requirement: TAC-261.

c. Ground/Academic Training. Review required MAWTS-1 Academic Support Package Lectures.

d. Crew Requirement. As listed at the end of each event.

e. Flight Training. (1 Sortie, 1.5 Hours).

TAC-261 1.5 C,R 2 UH-1N A N NS

Goal. Introduce tactical CC responsibilities.

Requirement

(1) Introduce CC responsibilities assisting the pilot in accomplishing tactical missions to include threat profiles, HIE and ordnance considerations.

(2) Demonstrate the ability to perform CC duties in the night TERF/CAL environment.

(3) Crew served ordnance shall be used during the conduct of this flight if available.

Performance Standards. Display ability to perform aircrew responsibilities in a tactical environment.

Prerequisite. CAL-223, NS-215, and one of the following: SWD-243, SWD-244, or SWD-245.

Ordinance. 1500 rds GAU-17 or 300 rds GAU-16 or 400 rds M-240.

External Syllabus Support. N/A.

Crew. NSI/CCUI or AOUI.

233. COMBAT QUALIFICATION PHASE

1. Purpose. To achieve Combat Qualified certification.

2. General. Upon completion of the Advanced Night Systems Qualification (ANSQ) stage the aircrew will be LLL complete. Completion of this stage meets the requirements of NSQ (LLL).

3. Ground Training. Ground training requirements are listed per stage and must be completed prior to beginning that stage of training. Academics are promulgated IAW the UH-1N T&R Manual and MAWTS-1 Course Catalog.

4. Advanced Night Systems Qualification (ANSQ)

a. Purpose. To develop proficiency in a confined area while using NVGs below .0022 lux.

b. General

(1) CCUI and AOUI shall be NSQ (HLL).

(2) AOUI requirement: ANSQ-311, ANSQ-312, and ANSQ-313.

c. Crew Requirement. As listed at the end of each event.

d. Ground/Academic Training. Review the MAWTS-1 Course Catalog NVD Manual.

e. Flight Training. (3 Sorties, 4.5 Hours).

ANSQ-311 1.5 1 UH-1N A N NS

Goal. Develop proficiency in CALs while using NVDs during LLL conditions.

Requirement

(1) Brief/discuss comfort levels, NVG map preparation and aircrew coordination.

(2) Conduct low work and navigation skills while using NVDs during LLL.

Performance Standards. Display proficiency during confined area operations and HIE approaches while using NVDs under LLL conditions.

Prerequisite. TAC-261.

Ordinance. N/A.

External Syllabus Support. N/A.

Crew. NSI/CCUI or AOUI.

ANSQ-312

1.5 C,R 2 UH-1N A N NS

Goal. Introduce TERF and navigational aircrew coordination on NVDs during LLL.

Requirement. Aircrew will develop proficiency in the TERF environment in low level, contour and NOE flight.

Performance Standards. Display proficiency in all aspects of CAL and TERF navigation under LLL conditions.

Prerequisite. ANSQ-312.

Ordinance. N/A.

External Syllabus Support. N/A.

Crew. NSI/CCUI or AOUI.

ANSQ-313

1.5 C 2 UH-1N A N NS

Goal. Introduce night section tactical helicopter operations using NVGs under LLL.

Requirement. Conduct a tactical assault support mission in a low to medium threat environment. Aircrew will refine aircrew coordination skills and lookout doctrine.

Performance Standards. Display ability to conduct a tactical assault support mission in a low to medium threat environment under LLL conditions.

Prerequisite. ANSQ-311.

Ordinance. N/A.

External Syllabus Support. One or more assault helicopters.

Crew. NSI/CCUI or AOUI.

5. Specific Weapons Delivery (SWD)

a. Purpose. To develop techniques and profiles in conducting SWD gunnery under LLL conditions.

b. General

(1) Flights in this stage will be flown to expand the capabilities of the UH-1N CC and aerial gunner. Review the MAWTS-1 Academic Support Package Lectures and Aerial Gunnery Manual.

(2) AOUI requirement: SWD-315, SWD-316, and SWD-317.

c. Crew Requirement. As listed at the end of each event.

d. Flight Training. (3 Sorties, 4.5 Hours).

SWD-315

1.5

C,R 2 UH-1N A N NS

Goal. Introduce SWD GAU-16 gunnery under LLL conditions.

Requirement

(1) Brief/discuss NVD ordnance delivery in low light conditions, muzzle flash, rocket slag, weapons malfunction/stoppage and aircrew coordination.

(2) Emphasis on crew served weapons employment, weapons conditions, malfunctions, weapons preflight and arming/dearming.

Performance Standards. Demonstrate detailed knowledge of nomenclature, cycle of operation, BCWD and ability to safely and effectively employ the GAU-16 while using NVDs under LLL conditions.

Prerequisite. SWD-243.

Ordnance. 300 rds .50 Cal GAU-16.

External Syllabus Support. N/A.

Crew. NSI/CCUI or AOUI.

SWD-316

1.5

C,R 2 UH-1N A N NS

Goal. Introduce SWD GAU-17 gunnery under LLL conditions.

Requirement

(1) Brief/discuss NVD ordnance delivery in low light conditions, muzzle flash, rocket slag, weapons malfunction/stoppage and aircrew coordination.

(2) Emphasis on crew served weapons employment, weapons conditions, malfunctions, weapons preflight and arming/dearming.

Performance Standards. Demonstrate detailed knowledge of nomenclature, cycle of operation, BCWD and ability to safely and effectively employ the GAU-17 while using NVDs under LLL conditions.

Prerequisite. SWD-244.

Ordnance. 1500 rds 7.62 mm GAU-17.

External Syllabus Support. N/A.

Crew. NSI/CCUI or AOUI.

SWD-317 1.5 C,R 2 UH-1N A N NS

Goal. Introduce SWD M-240 gunnery under low LLL conditions.

Requirement

(1) Brief/discuss NVD ordnance delivery in low light conditions, muzzle flash, rocket slag, weapons malfunction/stoppage and aircrew coordination.

(2) Emphasis on aircrew coordination, crew served weapons employment, weapons conditions, malfunctions, weapons preflight and arming/dearming.

Performance Standards. Demonstrate detailed knowledge of nomenclature, cycle of operation, BCWD and ability to safely and effectively employ the M-240 while using NVDs under LLL conditions.

Prerequisite. SWD-245.

Ordnance. 400 rds 7.62 mm M-240.

External Syllabus Support. N/A.

Crew. NSI/CCUI or AOUI.

6. Tactics (TAC)

a. Purpose. To develop aircrew coordination for night tactical missions.

b. General

(1) The CCUI/SWDUI will refine crew responsibilities during night tactical missions.

(2) AOUI requirements: TAC-320, TAC-321.

c. Ground/Academic Training. Review UH-1N Tactical Manual and MAWTS-1 Course Catalog.

d. Crew Requirement. As listed at the end of each event.

e. Flight Training. (2 Sorties, 3.0 Hours).

TAC-320 1.5 C 1 UH-1N A (N)(NS)

Goal. Refine aircrew coordination during a night tactical mission in a medium/high threat environment. Develop aircrew coordination during night MEDEVAC, RECON inserts, TRAP, or Raids under MCCRES or WTI standards.

Requirement

(1) Brief/discuss aircrew coordination, comfort levels, situational awareness, and terrain suitability/obstacle/clearance.

(2) Conduct a tactical mission using escort and assault aircraft. Introduce helicopter maneuvers, formations, gunner

techniques, and CC responsibilities per current tactical doctrine.

Performance Standards. Display ability to perform aircrew responsibilities in a tactical environment.

Prerequisite. TAC-261.

Ordinance. 1500 rds GAU-17 or 300 rds GAU-16 or 400 rds M-240.

External Syllabus Support. Escort aircraft optional.

Crew. NSI/CCUI or AOUI.

TAC-321

1.5 C,R 2 UH-1N A N NS

Goal. Refine aircrew coordination during a night tactical mission in a medium/high threat environment.

Requirement

(1) Brief/discuss aircrew coordination, comfort levels, situational awareness, and terrain suitability/obstacle/clearance.

(2) Conduct a night tactical mission demonstrating SWD using NVDs. Introduce helicopter maneuvers, formations, gunner techniques, and CC responsibilities.

Performance Standards. Display ability to perform aircrew responsibilities in a tactical environment.

Prerequisite. TAC-320.

Ordinance. 1500 rds GAU-17 or 300 rds GAU-16 or 400 rds M-240.

External Syllabus Support. Escort aircraft optional.

Crew. NSI/CCUI or AOUI.

7. Escort (ESC)

a. Purpose. To develop proficiency in prescribed heliborne or surface escort formations and maneuvers per current tactical doctrine.

b. General. The CCUI/AOUI will develop a working knowledge of escort formations, maneuvers, and techniques associated with heliborne operations.

c. Crew Requirement. As listed at the end of each event.

d. Ground/Academic Training. Review the UH-1N Tactical Manual section on escort procedures and MAWTS-1 Course Catalog.

e. Flight Training. (1 Sortie, 1.5 Hours).

ESC-322

1.5 C,R 2 OR MORE ACFT A N NS

Goal. Introduce helicopter escort procedures.

Requirement

(1) Brief/discuss escort responsibilities to include sectors of fire and transports sectors of fire.

(2) Review escort principles, formations, techniques and responsibilities per tactical doctrine for helicopter and surface vehicles.

(3) Demonstrate knowledge of procedures required to escort surface vehicles or other helicopters.

Performance Standards. Demonstrate the ability to safely and effectively employ crew served weapons while operating as escort aircraft.

Prerequisite. ESC-250.

Ordinance. 1500 rds 7.62 mm GAU-17, 300 rds .50 Cal GAU-16, or 400 rds 7.62 mm M-240.

External Syllabus Support. 1 or 2 assault aircraft/1 convoy.

Crew. NSI/CCUI or AOUI.

8. Carrier Qualification (CQ)

a. Purpose. To introduce and develop the aircrew coordination required for flight operations from a carrier deck or air capable ship day and night.

b. General

(1) The CCUI/AOUI will become familiar with those procedures required for actual shipboard operations. Refer to LHA/LHD NATOPS and NWP-42 for carrier and air capable ship operations.

(2) Minimum of 5 landings for each CQ.

(3) AOUI requirement: DLQ-350, DLQ-351.

c. Ground Training. Review required equipment for shipboard/over-water operations.

d. Crew Requirement. As listed at the end of each event.

e. Flight Training. (2 Sorties, 2.0 Hours).

CQ-330 1.0 C,R 1 UH-1N A

Goal. Conduct day CQ flight.

Requirement. Day qualification.

Performance Standards. Demonstrate the ability/knowledge to perform shipboard flight operations to include LSE hand and arm signals.

Prerequisite. FCLP-201.

Ordinance. N/A.

External Syllabus Support. Landing platform afloat.

Crew. CCI/CCUI or AOUI.

CQ-331

1.0

C,R 1 UH-1N A N NS

Goal. Conduct NVG CQ flight.

Requirement

(1) Introduce night shipboard operation procedures while using NVDs.

(2) NVD qualification.

Performance Standards. Demonstrate the ability/knowledge to perform aided shipboard flight operations to include LSE hand and arm signals.

Prerequisite. CQ-330.

Ordinance. N/A.

External Syllabus Support. Landing platform afloat.

Crew. NSI/CCUI or AOUI.

234. FULL COMBAT QUALIFICATION PHASE

1. Purpose. To certify the CCUI in large scale integrated mission events; events having unique mission taskings; events having a low probability of execution in combat, or high-risk relative events.

2. General. *The terms DACM and RWDACM/FWDACM are not IAW T&R Manual, Administrative. Changes to reflect these terms are forthcoming.

a. Completion of the RWDACM stage meets the requirements for the CCUI to be RWDACM qualified. At the discretion of the squadron commanding officer a letter assigning the CCUI as RWDACM qualified shall be placed in the NATOPS jacket, APR and a tracking code of QUAL-618 shall be logged.

b. Completion of the FWDACM stage meets the requirements for the CCUI to be FWDACM qualified. At the discretion of the squadron commanding officer a letter assigning the CCUI as FWDACM qualified shall be placed in the NATOPS jacket, APR and a tracking code of QUAL-619 shall be logged.

c. Completion of CQ-430 meets the requirement for the CCUI to be unaided CQ qualified. At the discretion of the squadron commanding officer a letter assigning the CCUI as unaided CQ qualified shall be placed in the NATOPS jacket, APR and a tracking code of QUAL-617 shall be logged.

3. Helicopter Insertion/Extraction (HIE)

a. Purpose. To develop the ability to perform HIE operations.

b. General. Review MAWTS-1 Academic Support Package Lectures. Prior to conducting HIE a face-to-face brief with the Fastrope/Rappel/Spie/Jump Master is required.

c. Crew Requirement. As listed at the end of each event. If passengers are embarked, aircrew must be NSQ.

d. Flight Training. (6 Sorties, 6.0 Hours).

HIE-400 1.0 C,R 1 UH-1N A (N)(NS)

Goal. Introduce techniques for paradrop operations.

Requirement. Brief/discuss aircraft rigging, insertion techniques, aircrew coordination, and emergencies.

Performance Standards. Display proper crew coordination and ability to assist in paradrop operations.

Prerequisite. CAL-223. Initial flight will be flown under day conditions.

Ordinance. N/A.

External Syllabus Support. Jump Master.

Crew. CCI (NSI)/CCUI or AOUI.

HIE-401 1.0 C,R 1 UH-1N A (N)(NS)

Goal. Introduce techniques for water insertions.

Requirement. Brief/discuss aircraft rigging, insertion techniques, aircrew coordination, and emergencies.

Performance Standards. Display proper crew coordination and ability to assist in water insertion operations.

Prerequisite. CAL-223.

Ordinance. N/A.

External Syllabus Support. HRST Master.

Crew. CCI (NSI)/CCUI or AOUI.

HIE-402 1.0 C,R 1 UH-1N A

Goal. Introduce techniques for insertion/extraction using the Special Personnel Insertion/Extraction (SPIE) rig and Jacob's Ladder.

Requirement. Brief/discuss aircraft rigging, insertion/extraction techniques, aircrew coordination, and emergencies.

Performance Standards. Display proper crew coordination and ability to assist in SPIE or Jacob's Ladder operations.

Prerequisite. CAL-223.

Ordinance. N/A.

External Syllabus Support. HRST Master.

Crew. CCI/CCUI or AOUI.

HIE-403

1.0 C 1 UH-1N A

Goal. Introduce techniques for insertion using fastrope.

Requirement. Brief/discuss aircraft rigging, insertion techniques, aircrew coordination, and emergencies.

Performance Standards. Display proper crew coordination and ability to assist in fastrope operations.

Prerequisite. CAL-223.

Ordinance. N/A.

External Syllabus Support. HRST Master.

Crew. CCI/CCUI or AOUI.

HIE-404

1.0 C 1 UH-1N A

Goal. Introduce techniques for insertion using rappel.

Requirement. Brief/discuss aircraft rigging, insertion techniques, aircrew coordination, and emergencies.

Performance Standards. Display proper crew coordination and ability to assist in rappel operations.

Prerequisite. CAL-223.

Ordinance. N/A.

External Syllabus Support. HRST Master.

Crew. CCI/CCUI or AOUI.

HIE-405

1.0 C 1 UH-1N A

Goal. Introduce techniques for emergency rescue hoist and external load procedures.

Requirement

(1) Brief and discuss engine failures, tail rotor emergencies, inadvertent IMC, settling with power, aircraft rigging, hook capabilities, hoist capabilities, aircrew coordination, HST procedures, ground crew brief, emergencies, and load jettison.

(2) Demonstrate/introduce proper techniques for external loads and hoist pickup.

(3) Complete three iterations of hoist operations (extract) or three iterations of hook procedures (pick-up, transit, delivery).

Performance Standards. Conduct flight and hook/hoist procedures IAW the UH-1N NATOPS Manual, UH-1N TACMAN, HIE Manual, and local directives.

Prerequisite. EXT-175.

Ordinance. N/A.

External Syllabus Support. Appropriate external weight.

Crew. CCI/CCUI or AOUI.

HIE-406

1.0

C 1 UH-1N A N NS

Goal. Introduce techniques for insertion with fastrope or rappel using NVDs.

Requirement. Brief/discuss aircraft rigging, insertion techniques, aircrew coordination, and emergencies.

Performance Standards. Display proper crew coordination and ability to assist in fastrope or rappel operations while using NVDs.

Prerequisite. HIE-403 or HIE-404. Day flight will be flown before flying applicable night flight.

Ordinance. N/A.

External Syllabus Support. HRST Master.

Crew. NSI/CCUI or AOUI.

4. Rotary Wing Defensive Air Combat Maneuvering (RWDACM)

a. Purpose. To develop aircrew responsibility, coordination and situational awareness required during defensive maneuvering against RW aircraft.

b. General

(1) The CCUI and AOUI will develop crew responsibilities in assisting the pilots in accomplishing defensive maneuvers. Once complete with the stage and RQD-618 the CC/AO may be qualified in writing RWDACM by the squadron commander.

(2) AOUI requirements: Same as CCUI.

(3) CCUI and AOUI must complete RQD-618 to be RWDACM Qualified.

c. Crew Requirement. As listed at the end of each event.

d. Ground Training. Review applicable Tactical Manual, MAWTS-1 Academic Support Package lectures, and DACM Manual.

e. Flight Training. (3 Sorties, 3.5 Hours).

DACM-4101.5 C,R 1 UH-1N A

Goal. Introduce air-to-air gunnery (AAG).

Requirement. Introduce AAG using shadow gunnery. Towed banner, dart, or Moving Land Target (MLT) may be used if available.

Performance Standards. Demonstrate detailed knowledge of nomenclature, cycle of operation, BCWD and ability to safely and effectively employ crew served weapons.

Prerequisite. Any one of the following; SWD-231, SWD-232, or SWD-233.

Ordinance. 1500 rds 7.62 mm GAU-17, 300 rds .50 Cal GAU-16, or 400 rds 7.62 mm M-240.

External Syllabus Support. MLT range, banner, or dart.

Crew. SWDI/CCUI or AOUI.

DACM-4111.0 C,R 1 UH-1N A

Goal. Introduce CC responsibilities during 1 v 1 RWDACM maneuvers.

Requirement

(1) Introduce basic defensive maneuvers, lookout procedures and identification of aircraft, missiles and AAA threats.

(2) Brief/discuss aircrew coordination, situational awareness and the use of crew served weapons against known threats.

Performance Standards. CCUI or AOUI will conduct flight IAW Tactical Manual, MAWTS-1 Assault Support Package, and DACM Manual.

Prerequisite. CAL-223.

Ordinance. N/A.

External Syllabus Support. One adversary helicopter, dissimilar if available.

Crew. DACMI/CCUI or AOUI.

DACM-4121.0 C,R 2 UH-1N A

Goal. Introduce CC responsibilities during 2 v 1 RWDACM maneuvers.

Requirement

(1) Introduce basic defensive maneuvers, lookout procedures and identification of aircraft, missiles and AAA threats.

(2) Brief/discuss aircrew coordination, situational awareness and the use of crew served weapons against known threats.

Performance Standards. CCUI or AOUI will conduct flight IAW Tactical Manual, MAWTS-1 Assault Support Package, and DACM manual.

Prerequisites. DACM-411.

Ordinance. N/A.

External Syllabus Support. One adversary helicopter, dissimilar if available.

Crew. DACMI/CCUI or AOUI.

5. Fixed Wing Defensive Air Combat Maneuvers (FWDACM)

a. Purpose. To develop the aircrew coordination and situational awareness required during Defensive Maneuvers (DM) against FW threats.

b. General

(1) The CCUI/AOUI will develop crew responsibilities in assisting the pilots in accomplishing defensive maneuvers. Completion of this stage meets the requirements for designation as DACM Qualified. A qualification letter shall be placed in the NATOPS with a copy in the APR and a flight logbook entry.

(2) AOUI requirements: Same as CCUI.

(3) Upon completion of this stage of training, CCUI and AOUI will be qualified in all aspects of DACM.

c. Crew Requirements. As listed at the end of each event.

d. Ground Training. Review applicable MAWTS-1 Academic Support Package lectures and DACM Manual.

e. Flight Training. (3 Sorties, 3.0 Hours).

DACM-414 1.0 C,R 1 UH-1N A

Goal. Introduce CC responsibilities during 1 v 1 FWDACM.

Requirement

(1) Review lookout procedures and identification of aircraft, missiles and AAA threat.

(2) Introduce section DM against airborne FW threats.

(3) Brief/discuss aircrew coordination, situational awareness and crew served weapons against known threats.

Performance Standards. CCUI or AOUI will conduct flight IAW Tactical Manual, MAWTS-1 ASP, and DACM manual.

Prerequisite. DACM-412.

Ordinance. N/A.

External Syllabus Support. One adversary helicopter, dissimilar if available.

Crew. DACMI/CCUI or AOUI.

DACM-415

1.0 C,R 2 UH-1N A

Goal. Introduce CC responsibilities during 2 v 1 FWDACM.

Requirement

- (1) Review lookout procedures and identification of aircraft, missiles and AAA threat.
- (2) Introduce section DM against airborne FW threats.
- (3) Brief/discuss aircrew coordination, situational awareness and crew served weapons against known threats.

Performance Standards. CCUI or AOUI will conduct flight IAW Tactical Manual, MAWTS-1 ASP, and DACM Manual.

Prerequisite. DACM-414.

Ordinance. N/A.

External Syllabus Support. One FW adversary.

Crew. DACMI/CCUI or AOUI.

DACM-416

1.0 C,R 2 UH-1N A

Goal. Introduce CC responsibilities during 2 Escort v 2 FWDACM.

Requirement

- (1) Review helicopter escort procedures, lookout procedures and identification of aircraft, missiles and AAA threat.
- (2) Introduce section DM against airborne FW threats while supporting assault package.
- (3) Brief/discuss aircrew coordination, situational awareness and crew served weapons against known threats.

Performance Standards. CCUI or AOUI will conduct flight IAW Tactical Manual, MAWTS-1 ASP, and DACM manual.

Prerequisite. DACM-415.

Ordinance. N/A.

External Syllabus Support. 2 FW adversary and one assault aircraft (optional).

Crew. DACMI/CCUI or AOUI.

6. Nuclear, Biological, and Chemical Warfare (NBC)

a. Purpose. To develop proficiency with the AR-5 protective assembly during normal and tactical flight operations.

b. General

(1) For the safe execution of initial NBC flights, one pilot and one aircrewman shall remain unmasked. On subsequent flights, all aircrew may remain masked.

(2) AOUI requirement: NBC-420.

c. Crew Requirement. As listed at the end of each event.

d. Ground/Academic Training

(1) Discuss and review NBC information contained in the appropriate Tactical Manual.

(2) Discuss hookup and operating procedures in the aircraft.

(3) Brief and discuss egress drills with full NBC protective equipment. Simulate both over-land and over-water emergencies.

e. Flight Training. (1 Sortie, 1.5 Hours).

NBC-420

1.0

C,R 1 UH-1N A

Goal. Conduct normal and tactical flight operations in a NBC environment.

Requirement. Conduct low work, pattern work, CALs, and autorotations. The CCUI and AOUI shall wear the protective mask for the duration of the flight.

Performance Standards. Demonstrate the ability to perform aircrew responsibilities in the NBC environment.

Prerequisite. CAL-223.

Ordinance. N/A.

External Syllabus Support. N/A.

Crew. CCI/CCUI or AOUI.

7. Carrier Qualification (CQ)

a. Purpose. To introduce and develop the aircrew coordination required for flight operations from a carrier deck or air capable ship day and night.

b. General

(1) The CCUI/AG will become familiar with those procedures required for actual shipboard operations. Refer to LHA/LHD NATOPS and NWP-42 for carrier and air capable ship operations.

(2) Minimum of 5 landings for each CQ.

(3) AOUI requirement: CQ-430.

c. Ground Training. Review required equipment for shipboard/over-water operations.

d. Crew Requirement. As listed at the end of each event.

e. Flight Training. (1 Sortie, 1 Hour).

CQ-430 1.0 C,R 1 UH-1N A N

Goal. Night unaided CQ introduction.

Requirement

(1) Introduce night unaided shipboard operation procedures.

(2) Night unaided shipboard qualification.

Performance Standards. Demonstrate the ability/knowledge to perform unaided shipboard flight operations to include the LSE hand and arm signals.

Prerequisite. FCLP-202.

Ordinance. N/A.

External Syllabus Support. Landing platform afloat.

Crew. CCI/CCUI or AOUI.

250. INSTRUCTOR TRAINING

1. Purpose. To develop standardized FRS instructor CCs with the ability to teach flight skills requisite to qualification as a Combat Capable CC.

2. General. Upon completion of the Crew Chief Instructor (CCI) stage, the IUT may be designated a CCI by the FRS squadron commanding officer. The CCIUT must be a TERFI, SWDI, and NSQ (LLL) prior to beginning CCIUT training.

3. CCI

a. Ground Training. CCIUT stage lecture.

b. Flight Training. (2 Sorties, 3.0 Hours).

CCI-500 1.5 E 1 UH-1N A

Goal. CCI will demonstrate techniques of instructing/evaluating normal ground procedures, passenger, and inflight procedures for the Combat Capable phase of training.

Requirement

(1) Demonstrate standard NATOPS procedures to include hand and arm signals.

(2) Emphasize aircrew coordination and comfort level.

Performance Standards. Demonstrate instructional techniques to instruct CCUIs in the Combat Capable phase.

Prerequisite. TAC-261.

Ordinance. N/A.

External Syllabus Support. N/A.

Crew. CCI/CCUI or AOUI.

CCI-504

1.5

E 1 UH-1N A

Goal. Demonstrate techniques of instructing/evaluating external weight and hoist operations and procedures.

Requirement

(1) Brief/discuss aircrew coordination, lost comm, ICS terminology, lookout doctrine, emergency procedures, load oscillation, and load release.

(2) Instruct at least two hookups, flight, and release operations.

(3) Instruct procedures, signals, and communications for hoist procedures.

Performance Standards. Demonstrate instructional techniques to CCUIs during external weight and hoisting procedures.

Prerequisite. CCI-500.

Ordinance. N/A.

External Syllabus Support. N/A.

Crew. CCI/CCUI or AOUI.

251. GRADUATE LEVEL COURSES

1. General. There are seven graduate level courses that qualify instructors for specific portions of the T&R syllabus. These courses are as follows:

- a. Weapons and Tactics Instructor (WTI).
- b. Night Systems FAM Instructor (NSFI).
- c. Night Systems Instructor (NSI).
- d. Night Systems SAR Instructor (NSSI).
- e. Terrain Flight Instructor (TERFI).
- f. Defensive Air Combat Maneuvers Instructor (DACMI).
- g. Specific Weapons Delivery Instructor (SWDI)

2. The above courses and their respective training codes are listed in the MAWTS-1 Course Catalog.

252. REQUIREMENTS, QUALIFICATIONS, AND DESIGNATIONS (RQD)1. NATOPS Evaluation Stage

- a. Purpose. To conduct NATOPS evaluation.
- b. General. Flights flown in this stage are evaluation flights. CRP is not awarded for these flights. CRP credit may be realized by logging the junior training code(s) listed in the flight description on the NAVFLIRS along with the RQD code.
- c. Ground Training. Per applicable directives.
- d. Crew Requirement. NATOPS Evaluator or Instructor and CC or AO.
- e. Flight Training. (1 Sortie, 1.5 Hours).

RQD-601 1.5 C,R E 1 UH-1N A

Goal. Conduct the annual NATOPS evaluation.

Requirement. Conduct a CC NATOPS evaluation per criteria in the UH-1N NATOPS Manual.

Performance Standards. IAW NATOPS.

Prerequisite. CCX-181.

Ordinance. N/A.

External Syllabus Support. N/A.

Crew. ANI/CCUI or AOUI.

2. Qualification Stage

- a. Purpose. To track qualifications.
- b. General
 - (1) Codes in this stage are qualification codes. CRP credit may be realized by logging the junior training code(s) listed in the flight description on the NAVFLIRS along with the RQD code. This code shall be logged on initial qualification flight only.
 - (2) DACM-618 will be flown as an actual flight and logged with an ATF.
- c. Ground Training. Per applicable directives.
- d. Crew Requirement. IAW applicable training stage.
- e. Flight Training. (1 Sortie, 1.0 Hour)

QUAL-610 E UH-1N A

Goal. Tracking code for TERF qualification.

Requirement. Successfully complete the requirements of CAL-223. Code shall be logged in conjunction with CAL-223.

Prerequisite. See CAL-223.

QUAL-611

E UH-1N A

Goal. Tracking code for Night Systems (HLL) qualification.

Requirement. Successfully complete the requirements of TAC-261. This code shall be logged in conjunction with TAC-261.

Prerequisite. See TAC-261.

QUAL-612

E UH-1N A

Goal. Tracking code for Advanced Night Systems (LLL) qualification.

Requirement. Successfully complete the requirements of ANSQ-312. This code shall be logged in conjunction with ANSQ-312.

Prerequisite. See ANSQ-312.

QUAL-615

E UH-1N A

Goal. Tracking code for Day Carrier qualification.

Requirement. Successfully complete the requirements of CQ-330. This code shall be logged in conjunction with CQ-330.

Prerequisite. See CQ-330.

QUAL-616

E UH-1N A

Goal. Tracking code for NVD Carrier qualification (NVDCQ).

Requirement. Successfully complete the requirements of CQ-331. This code shall be logged in conjunction with CQ-331.

Prerequisite. See CQ-331.

QUAL-617

E UH-1N A

Goal. Tracking code for night unaided Carrier Qualification (Night CQ).

Requirement. Successfully complete the requirements of CQ-430. This code shall be logged in conjunction with CQ-430.

Prerequisite. See CQ-430.

QUAL-618

E UH-1N A

Goal. Tracking code for RWDACM qualification.

Requirement. Completion of the RWDACM stage meets the requirements for the PUI to be RWDACM qualified. At the discretion of the squadron commanding officer a letter assigning the PUI as RWDACM qualified shall be placed in the NATOPS jacket, APR and a tracking code of QUAL-618 shall be logged.

Prerequisite. DACM-412.

QUAL-619

E UH-1N A

Goal. Tracking code for FWDACM qualification.

Requirement. Successfully complete the requirements of DACM-416. This code shall be logged in conjunction with DACM-416.

Prerequisite. See DACM-416.

3. Aerial Gunner Qualification Stage

a. Purpose. To achieve qualification as an aerial gunner.

b. General

(1) Completion of this stage qualifies the CCUI/AOUI for designation as an aerial gunner on the respective weapon. Appropriate documentation (ATFs with rounds-count) will be completed for each weapon prior to designation as aerial gunner. A designation qualification letter shall be placed in the NATOPS Jacket with a copy in the APR and flight log book entry.

(2) AOUI requirement: RQD 620, 621, and 622.

c. Ground Training. Review MAWTS-1 Academic Support Package lectures and Aerial Gunnery Manual. Written examinations shall be administered prior to each individual weapon evaluation flight.

d. Crew Requirement. SWDI and CCUI or AOUI.

e. Flight Training. (3 Sorties, 4.5 Hours).

QUAL-620

1.5

C,R E 2 UH-1N A N NS

Goal. GAU-16 aerial gunner qualification.

Requirement

(1) Discuss/brief weapon troubleshooting and malfunctions.

(2) Lasers should be used if available.

(3) Review BCWD principles.

Performance Standards. Demonstrate detailed knowledge in all aspects of BCWD, nomenclature, weapon checklist and usage, and troubleshooting procedures. Demonstrate proficiency in safe and effective employment of the GAU-16 while using NVDs.

Prerequisite. NSQ (LLL), ESC-322, and SWD-315.

Ordinance. 300 rds 7.62mm GAU-16.

External Syllabus Support. N/A.

QUAL-621

1.5 C,R E 2 UH-1N A N NS

Goal. GAU-17 aerial gunner qualification.

Requirement

- (1) Discuss/brief weapon troubleshooting and malfunctions.
- (2) Lasers should be utilized if available.
- (3) Review BCWD principles.

Performance Standards. Demonstrate detailed knowledge in all aspects of BCWD, nomenclature, weapon checklist and usage, and troubleshooting procedures. Demonstrate proficiency in safe and effective employment of the GAU-17 while using NVDs.

Prerequisite. NSQ (LLL), ESC-322, and SWD-316.

Ordinance. 1500 rds 7.62mm GAU-17.

External Syllabus Support. N/A.

QUAL-622

1.5 C,R E 2 UH-1N A N NS

Goal. M-240 aerial gunner qualification.

Requirement

- (1) Discuss/brief weapon troubleshooting and malfunctions.
- (2) Lasers should be used if available.
- (3) Review BCWD principles.

Performance Standards. Demonstrate detailed knowledge in all aspects of BCWD, nomenclature, weapon checklist and usage, and troubleshooting procedures. Demonstrate proficiency in safe and effective employment of the M-240 while using NVDs.

Prerequisite. NSQ (LLL), ESC-322, and SWD-317.

Ordinance. 400 rds 7.62mm M-240.

External Syllabus Support. N/A.

4. Designation Stage

a. Purpose. To track designations.

b. General. Codes in this stage are designation codes. CRP credit may be realized by logging the junior training code(s) listed in the flight description on the NAVFLIRS along with the RQD code. This code shall be logged on initial designation flights only.

c. Ground Training. Per applicable directives.

d. Crew Requirement. IAW applicable training stage.

e. Flight Training. IAW applicable training stage.

IDSG-680

E UH-1N A

Goal. Tracking code for CCI designation.

Requirement. Successfully complete the requirements of CCI-504. Code shall be logged in conjunction CCI-504.

Performance Standards. See CCI-504.

Prerequisite. See CCI-504.

Ordnance. N/A.

External Syllabus Support. See CCI-504.

IDSG-681

E UH-1N A

Goal. Tracking code for TERFI designation.

Requirement. Successfully complete requirements per the MAWTS-1 Course Catalog. Code shall be logged in conjunction with designation flight.

Performance Standards. See MAWTS-1 Course Catalog.

Prerequisite. See MAWTS-1 Course Catalog.

Ordnance. N/A.

External Syllabus Support. See MAWTS-1 Course Catalog.

IDSG-682

E UH-1N A

Goal. Tracking code for SWDI GAU-16 designation.

Requirement. Successfully complete requirements per MAWTS-1 Course Catalog. Code shall be logged in conjunction with designation flight.

Performance Standards. See MAWTS-1 Course Catalog.

Prerequisite. See MAWTS-1 Course Catalog

Ordnance. N/A.

External Syllabus Support. See MAWTS-1 Course Catalog.

IDSG-683

E UH-1N A

Goal. Tracking code for SWDI GAU-17 designation.

Requirement. Successfully complete requirements per MAWTS-1 Course Catalog. Code shall be logged in conjunction with designation flight.

Performance Standards. See MAWTS-1 Course Catalog.

Prerequisite. See MAWTS-1 Course Catalog.

Ordinance. N/A.

External Syllabus Support. See MAWTS-1 Course Catalog.

IDSG-684

E UH-1N A

Goal. Tracking code for M-240 designation.

Requirement. Successfully complete requirements per MAWTS-1 Course Catalog. Code shall be logged in conjunction with designation flight.

Performance Standards. See MAWTS-1 Course Catalog.

Prerequisite. See MAWTS-1 Course Catalog.

Ordinance. N/A.

External Syllabus Support. See MAWTS-1 Course Catalog.

IDSG-688

E UH-1N A

Goal. Tracking code for DACMI designation.

Requirement. Successfully complete requirements per MAWTS-1 Course Catalog. Code shall be logged in conjunction with designation flight.

Performance Standards. See MAWTS-1 Course Catalog.

Prerequisite. See MAWTS-1 Course Catalog.

Ordinance. N/A.

External Syllabus Support. See MAWTS-1 Course Catalog.

IDSG-694

E UH-1N A

Goal. Tracking code for NSFI designation.

Requirement. Successfully complete requirements per MAWTS-1 Course Catalog. Code shall be logged in conjunction with designation flight.

Performance Standards. See MAWTS-1 Course Catalog.

Prerequisite. See MAWTS-1 Course Catalog.

Ordinance. N/A.

External Syllabus Support. See MAWTS-1 Course Catalog.

IDSG-695

E UH-1N A

Goal. Tracking code for NSSI designation.

Requirement. Successfully complete requirements per MAWTS-1 Course Catalog. Code shall be logged in conjunction with designation flight.

Performance Standards. See MAWTS-1 Course Catalog.

Prerequisite. See MAWTS-1 Course Catalog.

Ordinance. N/A.

External Syllabus Support. See MAWTS-1 Course Catalog.

IDSG-696

E UH-1N A

Goal. Tracking code for NSI designation.

Requirement. Successfully complete the requirements IAW MAWTS-1 Course Catalog. Code shall be logged in conjunction with designation flight.

Performance Standards. See MAWTS-1 Course Catalog.

Prerequisite. See MAWTS-1 Course Catalog.

Ordinance. N/A.

External Syllabus Support. See MAWTS-1 Course Catalog.

IDSG-699

E UH-1N A

Goal. Tracking code for WTI designation.

Requirement. Successfully complete requirements per MAWTS-1 Course Catalog. Code shall be logged in conjunction with designation flight.

Performance Standards. See MAWTS-1 Course Catalog.

Prerequisite. See MAWTS-1 Course Catalog.

Ordinance. N/A.

External Syllabus Support. See MAWTS-1 Course Catalog.

260. ORDNANCE REQUIREMENTS. Annual ordnance requirements are developed on a "per crew" basis per OPNAVNOTE 8010.

Basic/Transition/Conversion

ORDNANCE	100 SERIES	200 SERIES	300 SERIES	400 SERIES	500 SERIES	600 SERIES	REFRESH	ANNUAL *
7.62mm	3,800	9,500	7,600	1,900	7,600	1,900	17,100	13,300
.50 Cal	600	1,500	1,200	300	1200	300	2,700	2,100

*Annual ordnance requirements maintain an aircrew member at proficiency.

NOTE: The 200, 300 and 600 series expenditures are firm. The CCUI/AOUI must shoot all of these rounds. For the 100 and 400 series flights, any weapon may be fired for flexibility. Ordnance requirements are computed firing 1500 rounds 7.62 mm or 300 rounds .50 Cal on these flights.

Combat Capable Phase

STAGE	FLT CODE	FLT HRS	REFLY INTERVAL	CRP	C	R	E	N	NS	A/C OR SIM	# A/C
FAM	101	1.5	*	3.0						A	1
FAM	102	1.5	*	3.0	X	X				A	1
FAM	112	1.5	*	3.0	X	X		N		A	1
FAM	115	1.5	*	4.0	X	X		N	NS	A	1
FORM	131	1.5	*	3.0	X					A	2
FORM	132	1.5	*	4.0	X	X		N	NS	A	2
TERF	140	1.5	*	3.0						A	1
TERF	141	1.5	*	4.0	X	X		N	NS	A	1
NAV	151	1.5	*	3.0						A	1
NAV	152	1.5	*	4.0	X	X		N	NS	A	1
SSWD	160	N/A	*	2.0						S	
SWD	161	1.5	*	4.0	X	X				A	1
CAL	170	1.5	*	3.0						A	1
CAL	171	1.5	*	3.0	X					A	1
CAL	172	1.5	*	4.0	X			N	NS	A	1
EXT	175	1.5	*	3.0	X					A	1
CCX	181	2.0	*	7.0	X	X	X			A	1
Sub Total 100		24.5		60.0							
Pre 100		0.0		0.0							
100 Level Total		24.5		60.0							

Figure 2-2.--MOS 6174 Refly Interval, Combat Readiness Percentage.

Combat Ready Phase											
STAGE	CODE	FLT HRS	REFLY INTERVAL	CRP VALUE	C	R	E	N	NS	A/C OR SIM	# A/C
FCLP	201	1.0	365	0.5	X	X				A	1
FCLP	202	1.0	365	1.0	X	X		N	NS	A	1
TERF	210	1.5	180	0.5	X					A	1
TERF	211	1.5	180	1.0	X	X		N	NS	A	2
NS	215	1.5	180	1.0	X	X		N	NS	A	1
CAL	220	1.5	180	0.5	X					A	2
CAL	221	1.5	180	1.0	X	X		N	NS	A	2
CAL	223	1.5	180	1.0	X	X		N	NS	A	2
SWD	240	1.5	180	1.0	X					A	1
SWD	241	1.5	180	1.0	X					A	1
SWD	242	1.5	180	1.0	X					A	1
SWD	243	1.5	180	1.0	X	X		N	NS	A	1
SWD	244	1.5	180	1.0	X	X		N	NS	A	1
SWD	245	1.5	180	1.0	X	X		N	NS	A	1
ESC	250	1.5	180	1.0	X			(N)	(NS)	A	2
TAC	261	1.5	180	1.5	X	X		N	NS	A	2
Sub Total 200		23.0		15.0							
Total 100		24.5		60.0							
Total 100 & 200		47.5		75.0							

Figure 2-2.--MOS 6174 Refly Interval, Combat Readiness Percentage--Continued.

Combat Qualification Phase

STAGE	CODE	FLT HRS	REFLY INTERVAL	CRP VALUE	C	R	E	N	NS	ACFT OR SIM	# A/C
ANSQ	311	1.5	180	2.0				N	NS	A	1
ANSQ	312	1.5	180	2.0	X			N	NS	A	2
ANSQ	313	1.5	180	2.0	X	X		N	NS	A	2
SWD	315	1.5	180	2.0	X	X		N	NS	A	2
SWD	316	1.5	180	2.0	X	X		N	NS	A	2
SWD	317	1.5	180	2.0	X	X		N	NS	A	2
TAC	320	1.5	180	2.0	X			(N)	(NS)	A	1
TAC	321	1.5	180	2.0	X	X		N	NS	A	2
ESC	322	1.5	180	1.5	X	X		N	NS	A	2
CQ	330	1.0	365	1.0	X	X				A	1
CQ	331	1.0	365	1.5	X	X		N	NS	A	1
Sub Total 300		15.5		20.0							
Total 100 & 200		47.5		75.0							
Total 100, 200 & 300		63.0		95.0							

Figure 2-2.--MOS 6174 Refly Interval, Combat Readiness Percentage--Continued.

Full Combat Qualification Phase

STAGE	CODE	FLT HRS	REFLY INTERVAL	CRP VALUE	C	R	E	N	NS	A/C OR SIM	# A/C
HIE	400	1.0	365	0.2	X	X		(N)	(NS)	A	1
HIE	401	1.0	365	0.2	X	X				A	1
HIE	402	1.0	365	0.2	X	X				A	1
HIE	403	1.0	365	0.2	X					A	1
HIE	404	1.0	365	0.2	X					A	1
HIE	405	1.0	365	0.2	X					A	1
HIE	406	1.0	365	0.2				N	NS	A	1
DACM	410	1.5	365	0.2	X	X				A	1
DACM	411	1.0	365	0.5	X	X				A	1
DACM	412	1.0	365	0.5	X	X				A	2
DACM	414	1.0	365	0.5	X	X				A	1
DACM	415	1.0	365	0.5	X	X				A	2
DACM	416	1.0	365	1.0	X	X				A	2
NBC	420	1.0	365	0.2	X	X				A	1
CQ	430	1.0	365	0.2	X	X		N		A	1
Sub Total 400		15.5		5.0							
Total 100, 200, & 300		63.0		95.0							
Total 100, 200, 300, 400		78.5		100.0							

Figure 2-2.--MOS 6174 Refly Interval, Combat Readiness Percentage--Continued.

Instructor Training

STAGE	CODE	FLT HRS	REFLY INTERVAL	CRP VALUE	C	R	E	N	NS	A/C OR SIM	# A/C
CCI	500	1.5	*							A	1
CCI	504	1.5	*							A	1
Sub Total 500 Level		3.0		0.0							

Requirements, Qualifications, and Designations

STAGE	CODE	FLT HRS	REFLY INTERVAL	TRACK	C	R	E	N	NS	A/C OR SIM	# A/C	NOTES
RQD	601	1.5	365		X	X	X			A	1	NATOPS CHECK
QUAL	610		*	X	X	X						TERF QUAL
QUAL	611		*	X	X	X						NSQ HLL
QUAL	612		*	X	X	X						NSQ LLL
QUAL	615		*	X	X	X						CQ DAY
QUAL	616		*	X	X	X						NVDCQ
QUAL	617		*	X	X	X						CQ UNAIDED
QUAL	618	1.0	*		X	X	X			A		DACM (RW)
QUAL	619		*	X	X	X						DACM
QUAL	620	1.5	*		X	X	X			A		GAU-16 QUAL
QUAL	621	1.5	*		X	X	X			A		GAU-17 QUAL
QUAL	622	1.5	*		X	X	X			A		M-240 QUAL
IDSG	680		*	X	X	X						CCI
IDSG	681		*	X	X	X						TERFI
IDSG	682		*	X	X	X						SWDI GAU-16
IDSG	683		*	X	X	X						SWDI GAU-17
IDSG	684		*	X	X	X						SWDI M-240
IDSG	688		*	X	X	X						DACMI
IDSG	694		*	X	X	X						NSFI
IDSG	695		*	X	X	X						NSSI
IDSG	696		*	X	X	X						NSI
IDSG	699		*	X	X	X						WTI
		FLT HRS		CRP								
Sub Total		7.0		0.0								

Figure 2-2.--MOS 6174 Refly Interval, Combat Readiness Percentage--Continued.

Combat Ready Phase

STAGE	FLT CODE	FLT HRS	REFLY INTERVAL	CRP	C	R	E	N	NS	A/C OR SIM	# A/C
FAM	101	1.5	*	2.0						A	1
FAM	115	1.5	*	2.0	X	X		N	NS	A	1
FORM	131	1.5	*	5.0	X	X				A	2
FORM	132	1.5	*	5.0	X	X		N	NS	A	2
TERF	140	1.5	*	5.0						A	1
TERF	141	1.5	*	5.0	X	X		N	NS	A	1
NAV	152	1.5	*	5.0	X	X		N	NS	A	1
SSWD	160	N/A	*	1.0						S	
SWD	161	1.5	*	5.0	X	X				A	1
CAL	171	1.5	*	5.0	X					A	1
CAL	172	1.5	*	5.0	X	X		N	NS	A	1
CCX	181	1.5	*	15.0	X	X	X			A	1
Sub Total 100		16.5		60.0							
Pre 100		0.0		0.0							
100 Level Total		16.5		60.0							

Figure 2-3.--AO Refly Interval, Combat Readiness Percentage.

Combat Capable Phase

STAGE	CODE	FLT HRS	REFLY INTERVAL	CRP VALUE	C	R	E	N	NS	A/C OR SIM	# A/C
FCLP	201	1.0	365	1.0	X	X				A	1
FCLP	202	1.0	365	1.0	X	X		N	NS	A	1
TERF	210	1.5	180	1.0	X					A	1
TERF	211	1.5	180	1.5	X	X		N	NS	A	2
NS	215	1.5	180	1.0	X	X		N	NS	A	1
CAL	220	1.5	180	1.5	X					A	2
CAL	221	1.5	180	1.0	X	X		N	NS	A	2
CAL	223	1.5	180	1.5	X	X		N	NS	A	2
SWD	240	1.5	180	0.5	X					A	1
SWD	241	1.5	180	0.5	X					A	1
SWD	242	1.5	180	0.5	X					A	1
SWD	243	1.5	180	1.0	X	X		N	NS	A	1
SWD	244	1.5	180	1.0	X	X		N	NS	A	1
SWD	245	1.5	180	1.0	X	X		N	NS	A	1
TAC	261	1.5	180	1.0	X	X		N	NS	A	2
Sub Total 200		20.0		15.0							
Total 100		16.5		60.0							
Total 100 & 200		36.5		75.0							

Figure 2-3.--AO Refly Interval, Combat Readiness Percentage--Continued.

Combat Qualification Phase

STAGE	CODE	FLT HRS	REFLY INTERVAL	CRP VALUE	C	R	E	N	NS	A/C OR SIM	# A/C
ANSQ	311	1.5	180	2.0				N	NS	A	1
ANSQ	312	1.5	180	2.0	X			N	NS	A	2
ANSQ	313	1.5	180	2.0	X	X		N	NS	A	2
SWD	315	1.5	180	2.0	X	X		N	NS	A	2
SWD	316	1.5	180	2.0	X	X		N	NS	A	2
SWD	317	1.5	180	2.0	X	X		N	NS	A	2
TAC	320	1.5	180	2.0	X			(N)	(NS)	A	1
TAC	321	1.5	180	2.0	X	X		N	NS	A	2
CQ	330	1.0	365	2.0	X	X				A	1
CQ	331	1.0	365	2.0	X	X		N	NS	A	1
Sub Total 300		14.0		20.0							
Total 100 & 200		36.5		75.0							
Total 100, 200 & 300		50.5		95.0							

Figure 2-3.--AO Refly Interval, Combat Readiness Percentage--Continued.

Full Combat Qualification Phase

STAGE	CODE	FLT HRS	REFLY INTERVAL	CRP VALUE	C	R	E	N	NS	A/C OR SIM	# A/C
RWDACM	410	1.5	365	1.0	X	X				A	1
RWDACM	411	1.0	365	0.5	X	X				A	1
RWDACM	412	1.0	365	0.5	X	X				A	2
DACM	414	1.0	365	0.5	X	X				A	1
DACM	415	1.0	365	0.5	X	X				A	2
DACM	416	1.0	365	1.0	X	X				A	2
NBC	420	1.0	365	0.5	X	X				A	1
CQ	430	1.0	365	0.5	X	X		N		A	1
Sub Total 400		8.5		5.0							
Total 100, 200, & 300		50.5		95.0							
Total 100, 200, 300, 400		59.0		100.0							

Figure 2-3.--AO Refly Interval, Combat Readiness Percentage--Continued.

MOS 6174 FLIGHT UPDATE CHAINING

<u>STAGE</u>	<u>FLIGHT</u>	<u>FLIGHTS UPDATED</u>
FCLP	201	
	202	201
TERF	210	
	211	210
NS	215	211
CAL	220	
	221	220
	223	201, 202, 220, 221
SWD	240	
	241	
	242	
	243	211, 221, 240
	244	211, 221, 241
	245	211, 221, 242
ESC	250	211, 223, 240, 241, 242, 243, 244, 245
TAC	261	210, 211, 220, 221, 223, 240, 241, 242, 243, 244, 245
ANSQ	311	220, 221
	312	220, 221, 223, 311
	313	210, 211, 220, 221, 223
SWD	315	240, 243
	316	241, 244
	317	242, 245
TAC	320	210, 211, 220, 221, 223, 240, 241, 242, 243, 244, 245, 261
	321	210, 211, 220, 221, 223, 240, 241, 242, 243, 244, 245, 261, 320
ESC	322	250
CQ	330	201, 202
	331	201, 202, 330
HIE	400	
	401	
	402	
	403	
	404	
	405	403
DACM	410	240, 241, 242
	411	
	412	411
	414	
	415	414
	416	414, 415

Figure 2-4.--MOS 6174 Flight Update Chaining.

NBC 421

CQ 430 201, 202, 330, 331

Figure 2-4.--MOS 6174 Flight Update Chaining--Continued.

AERIAL GUNNER/OBSERVER FLIGHT UPDATE CHAINING

<u>STAGE</u>	<u>FLIGHT</u>	<u>FLIGHTS UPDATED</u>
FCLP	201	
	202	201
TERF	210	
	211	210
NS	215	211, 223
CAL	220	
	223	220
SWD	240	
	241	
	242	
	243	240
	244	241
	245	242
TAC	261	211, 223, 240, 241, 242, 243, 244, 245
ANSQ	311	223
	312	223, 311
	313	211, 311, 312
SWD	315	240
	316	241
	317	242
TAC	320	211, 223, 231, 232, 233, 234, 235, 236, 291
	321	211, 223, 231, 232, 233, 234, 235, 236, 291, 340
CQ	330	201, 202
	331	201, 202, 350
DACM	360	
	361	360
NBC	420	
CQ	430	201, 202, 350, 351
DACM	410	240, 241, 242
	411	
	412	411
	414	
	415	414
	416	414, 415

Figure 2-5.--Aerial Gunner/Observer Flight Update Chaining.